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SEVENTEENTH ANNUAL REPORT

OF THE

**State Board of Health
of Florida**



JACKSONVILLE, FLORIDA

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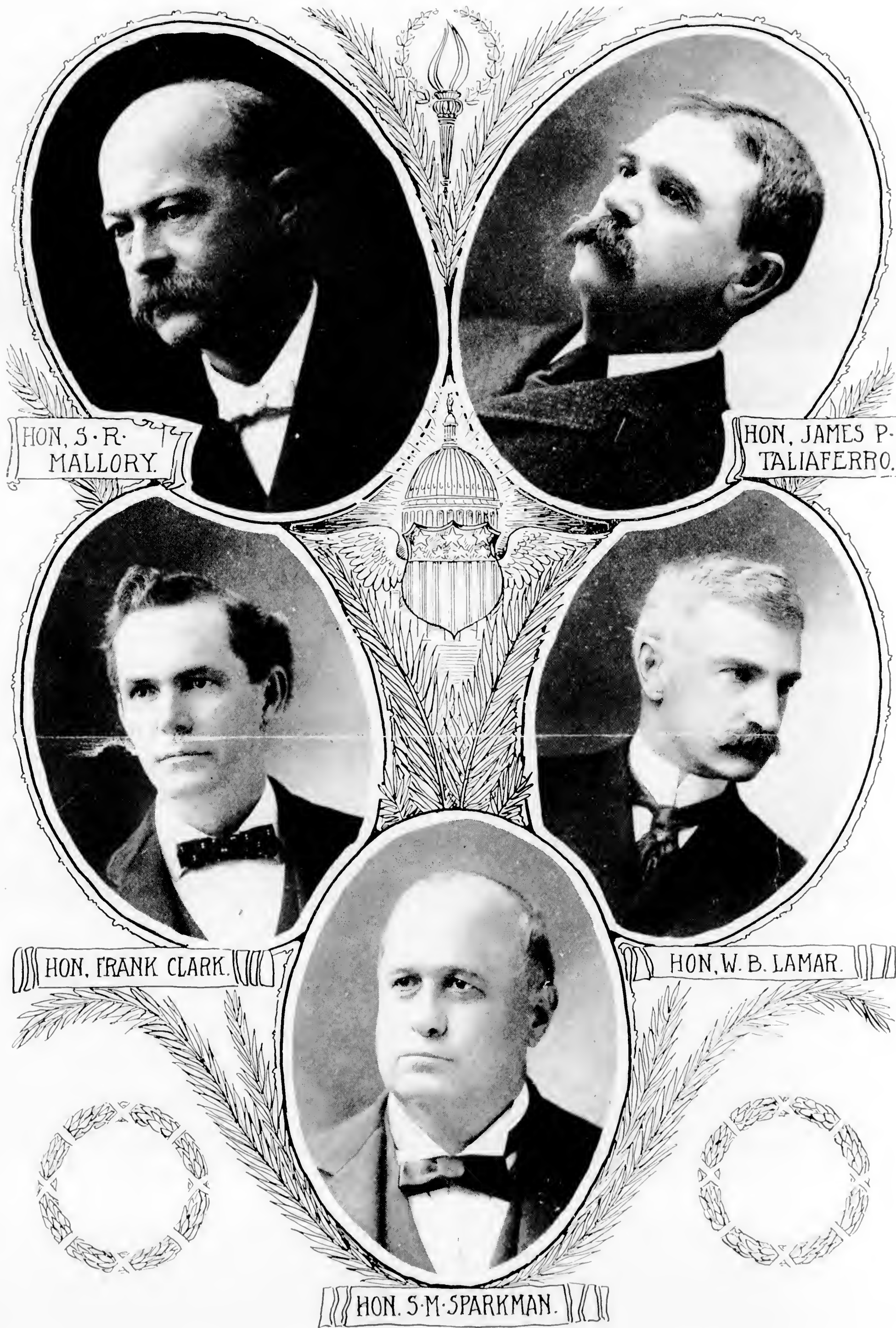
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THE FLORIDA DELEGATION IN CONGRESS.

LETTER OF TRANSMITTAL.

TAMPA, FLORIDA, March 6th, 1906.

*To His Excellency, Napoleon B. Broward,
Governor of Florida,
Tallahassee, Fla.*

DEAR SIR:

I have the honor to hand you the Annual Report of the State Health Officer, being a history of events which have transpired in health matters in the State during the year 1905.

The Report meets with the approval of my colleagues of the Board as well as from myself, and I trust that it may receive equally as favorable commendation from you. As it appears that every subject connected with the general sanitary management of the affairs of the State has been minutely dwelt upon and discussed, I cannot do better than to invite your attention to a most careful reading of the entire paper, for it would be impossible for me in a short space of time to single out any particular topic more worthy of notice than many others, and do it full justice. The State Health Officer, each succeeding year, dwells with forcible emphasis upon the necessity of a full vaccination of the entire State as a required preventive against smallpox. The Board has urged upon the Representatives of the people the pressing want of a compulsory vaccination law, if the expense which the people of Florida yearly are required to defray on account of smallpox prevalence in the State would be avoided, and it does appear to be almost a crime against intelligence and sound reason to permit a disease so altogether preventable to continue to disfigure, kill and terrify the people when at no expense and with a trivial discomfort such disgusting and loathsome sickness can be prevented by vaccination.

It is pleasing to note from the Health Officer's Report

that the Board has saved many lives in the free distribution of diphtheria antitoxin and that the Laboratory continues to grow not only in the confidence of the physicians of the State but in usefulness to the people. The Board is of the opinion that every dollar spent in enlarging the scope of work of the Laboratory and in assisting to a clearer and more accurate determination of disease, affords means by which life can be prolonged and sickness averted, if not altogether prevented. That the Laboratory of the Board is increasing in popular confidence is evidenced by the great number of specimens of disease growths which the director of that institution is called upon each year to examine and determine. It is a matter of gratification and pleasure to mention that since the Laboratory has been established, no errors of diagnosis have been made, and that under the able directorship of Dr. Andrade, the public health has been protected and lives saved when an early opportunity has been given to ascertain by microscopical examination the character of the illness.

Your attention is likewise invited to the commendable effort of Dr. Ennis of Narcoosee in providing comfortable surroundings and homes for consumptive visitors and natives. The State Health Officer speaks very highly of the humanitarian work of Dr. Ennis in devoting so much of his time, means and energy toward benefitting a class of invalids who are now as generally shunned and avoided as were the lepers of old, and it is therefore to be hoped that other philanthropists in the State may be induced to follow the example set by the worthy Doctor. It certainly would be a praiseworthy act on the part of the State to adopt the suggestion of the State Health Officer in this as in other Annual Reports and by legislative enactment establish a sanatorium for this class of sufferers in some of the piney forests of Florida where adequately distant from the bustle and excitement of towns, and with pleasant occupation they may receive the healing properties of the resinous atmosphere, enjoy the sunshine of our wonderful climate, and at the same time run

no risk of infecting our own native population. The State Board of Health would like to have you seriously and carefully consider this proposition with a view of endorsing the recommendation of the State Health Officer in this regard, particularly as other States in the Union, especially Texas and New York, have devoted quite large sums of money in preventive methods of this nature. We believe that the people of Florida will endorse any tender of help in this direction, for there is an evident interest being taken in the subject, as the State Health Officer states, daily applications are made for instructions and directions in preventive measures against consumption, and for a more extended distribution of prohibitory information against the "spitting habit." It is pleasing to learn that a more cleanly disposition in this respect is apparent, and that factories, cafes, and public buildings are being well supplied, everywhere in the State, with cuspidors or other receptacles for expectoration. A great deal in an educational line yet remains to be done in the smaller towns of the State, but the encouragement in sanitary reforms received in the larger cities, gives hope that the spirit of hygienic measures may spread to the smaller places, and indeed through the length and breadth of the State.

A subject deserving of more than passing notice, and of paramount importance to the State, is the destruction of mosquitoes, not only because they are annoying and irritating, and in some places in the State make life unbearable, but because some species are the direct and sole means of conveying disease to the human family. No intelligent person any longer disputes the fact that malaria can be avoided by shunning the bite of a particular species of mosquito. Miasm—marsh atmosphere—is no more thought of as a factor in producing chills and fever, for experiment and experience has shown full well that by living in well screened houses, and even by sleeping under mosquito nets with sufficiently fine mesh, persons can live healthfully in what have hitherto been considered exceedingly malarious localities. This subject of

mosquitodestruction is attracting attention not alone from its bearings on sanitation and health, but from a commercial point of view as having a direct influence on investments, looking to an increase in agricultural productive territory. The distinguished Health Officer of the Port of New York—Dr. A. H. Doty—very recently in a medical journal, tells interestingly of his experiments with mosquito destruction on Staten Island, which he has personally conducted and supervised otherwise for the past five years. He is convinced that by drainage and by close attention to screening of water containers, and where not absolutely necessary for use for storing water for drinking purposes, a complete doing away with these receptacles, together with an energetic and vigorous crusade against tin cans, tin pails, old pitchers and number of other water holding means, which are usually scattered about premises and afford a breeding place for mosquitoes, it will be an easy matter to get rid of the pest.

Individuals, he points out in his article, can do very much in controlling mosquito production in or on their own premises, but to effectually get rid of the insects the aid of the State must be invoked to institute in a systematic manner, methods of drainage of swamps, lowlands and marshes under competent sanitary engineers, so that funds may be economically directed and that the effort may not partake of a spasmodic fervor. The State of New Jersey is to be asked for an appropriation of \$350,000.00 to drain the salt-water marshes of the Atlantic seaboard of that State. This request would not be made unless it is thought that the State will obtain a return of millions of dollars in not only arable land but in an enlargement of State agricultural territory, where farmers can live comfortably and gather the yield of the land without irritating annoyance from mosquitoes. While Florida has no such quantities of mosquitoes as New Jersey, nor in the variety found here, of such vicious and voracious disposition as that State, yet mosquitoes are sufficiently annoying in the summer season to warrant the

State Health Officer in advising the people against contamination from these nuisances not only as regards health but likewise comfort. That mosquitoes of a special breed convey yellow fever the State had ample proof—if such had been needed to convince—at West Tampa and Pensacola last summer. The escape of those persons who heeded a warning in this respect and kept themselves from being bitten by the *Stegomyia* mosquito, and thereby an attack of yellow fever, was a wonderful demonstration of the truthfulness of the law of yellow fever transmission through the mosquito, and through the mosquito alone. I do not think that the Board can expend the people's money to a better purpose than in educationally directing their attention to these facts, by widely distributing entertaining literature descriptive of the variety and habits of the different species of mosquitoes found in Florida, and by indicating how those which convey disease may be easily detected and destroyed. The Board will approve of all measures suggested by the State Health Officer to accomplish this end and to further and increase experiments to establish disputed points of length of life, conveyance by common carriers and in merchandise of mosquitoes from known yellow fever and malaria infected localities.

There are other features in the Health Officer's account of State Health happenings during the past year, which are equally as interesting as those I have dwelt upon, but they cannot fail to attract your attention from even a casual reading of the document, so I shall not attempt to enter upon any further discussion of these subjects of disease prevention.

Probably the attention of the State and of neighboring States was the more attracted to a general health management in Florida during this past summer, than for several previous years; certainly since 1899 when yellow fever prevailed both at Key West and Miami. The interest was certainly keen, and from some quarters the criticism severe, unmerited and unjust, but I think that I can say with due regard for truthful statement, that outside of a

certain locality the confidence manifested by the people generally in the integrity, ability and wonderful comprehensive management of the State Board of Health, of sanitary conditions both at West Tampa and afterwards at Pensacola, was confirmed by the absence of anxiety and any doubt, after a knowledge of all facts had become known, by a trustful faith in the capability of the Board to confine the disease to the two places, thus permitting the commercial interests of the rest of the State to move smoothly and without annoying restrictions. My colleagues unite with me in pointing with especial pride to some features of management which it is thought have not been sufficiently recognized by our people nor has had that attention directed to their importance which the sequel of events justly shows them to be entitled to: The confinement of yellow fever to one case at West Tampa and to the City of Pensacola although prevailing in epidemic manner in the latter place. We regard this feat of sanitary management as a striking exhibition of executive skill, which has not been equalled or paralleled in any other State, nor in our own State except at Miami in 1899. Even at Miami the conditions were not similar, for all kinds of obstructive methods were pursued at one place, of which there was a total absence in the other.

The State Health Officer has entered so fully into an explanation of the various aspects of the Pensacola epidemic and of the control of the West Tampa case, that it is unnecessary for me to discuss this question any further, particularly as the chronological data given in the Health Officer's paper, very instructively and interestingly set forth the events of the summer in connection with yellow fever, and to which I invite your thoughtful attention.

Closely allied to the question of management of epidemic disease, is that of expense which attends such control. While the case of yellow fever at West Tampa seemingly cost the State quite a sum of money, yet in suppressing the disease in its incipency the resultant profit to the State far outweighed the comparatively insignificant amount which would have followed an epidemic.

So too, the money expended at Pensacola to suppress the spread of yellow fever and to shorten its duration was well applied for without a relentless warfare against infected mosquitoes which took energy and money to accomplish on the one hand, and a vigilant supervision of travel from Pensacola to prevent the disease extending, by persons in whom the infection may have entered and who if allowed to leave the city without detention at a non-infected camp, could easily infect other points in the State on the other hand, it can be appreciated that the amount of work and vigilance done and exercised was of a stupendous nature, requiring a number of men to carry out, material to be bought and help of all kinds to effect in an efficient manner. The State Health Officer in a tabulated statement gives in detail the expense of each outbreak as well as the current expenses of the Board during the year.

The position of State Health Officer in any State, especially so in Florida, where the State statutes impose a responsibility of management nowhere else found, is one of great trust and accountability to the people. The statute practically makes the State Health Officer the deciding factor in determining the existence of the three diseases of Cholera, Smallpox and Yellow Fever. On his decision or that of one of his Assistants especially delegated for the duty, alone rests the establishment of quarantine measures, and an enforcement of restrictions of travel and trade. It will be appreciated therefore that a State Health Officer must be of discerning mind, discreet judgment, and firm administration, qualities for governing situations in times of epidemics which are only acquired by experience and do not come intuitively. I feel competent to express an opinion in this regard, for I have seen the State Health Officer in his official conduct of sanitary affairs, during times when to have erred one way or the other would have meant a pestilential disturbance or a commercial ruin. Therefore when I speak of the acute exercise of all faculties of mind and experience which must be brought into active operation whereby judgment, discretion and expert knowledge may all be

harmonized, I think I voice the sentiment of the whole State that only a love for the cause, and an exalted idea of duty could induce any man to withgo the comforts and attractions of a home life to meet the exactions of office, the criticisms of the self-opinionated, or the fault-finding of the envious and prejudiced. When therefore, Dr. Porter tendered his resignation last October as State Health Officer, to be accepted at the close of the Pensacola epidemic, I was not surprised although I deeply regretted his action. The terrible nervous tension and mental strain under which he conducted the sanitary affairs of the State for three months, which, had every co-operation been extended to him, could not have lightened one whit the responsibility devolving on him to speedily suppress yellow fever in Pensacola and to limit the disease to that city, and which contrariwise had been increased by the opposing methods to his administration persistently indulged in by a few, had told upon his health and strength, and for a time I felt great anxiety for his physical welfare. It was never his intention to desert the fight, nor to yield to the demands of those who would have jeopardized the health of the rest of the State in order to exercise their own will and pleasure, by overthrowing all quarantine measures and going in and out of the cordon line at will.

At a special meeting of the Board held in Jacksonville on the 19th of last December, resolutions were passed asking Dr. Porter to withdraw his resignation and expressing to him the confidence of the Board in his ability as a Sanitarian and Executive Officer, and perfect satisfaction in his management of the sanitary affairs of the State for the past seventeen years, and more especially of the past summer. The Board realized that Dr. Porter had been severely handicapped in the clerical work of the office, through the death of Mr. Durrance, the Executive Clerk of the Board, at the very commencement of the trouble at West Tampa. By an intimate association with the work of the office, Mr. Durrance had been able to relieve the State Health Officer of a great deal of the

routine work of the Board, and altogether of the clerical feature of management; therefore when he died, not only did the clerical work of a mechanical character devolve upon the State Health Officer, but the money accounts of the State Health Officer notably increased by the exigencies of the yellow fever incidents, materially added to the work of the office. The Board felt that to expect Dr. Porter to be Clerk as well as Executive Officer was to unreasonably exact a service not in keeping with the dignity of the position which he is called upon to fill, and which time did not permit him to satisfactorily perform without undue tax on mental and physical strength, therefore the Board determined to relieve the State Health Officer of this burden and to avoid future contingencies of this character, such as confronted the State Health Officer last summer, by resolution ordered that a competent Assistant be employed who should travel with the State Health Officer and relieve him of all clerical work. The Board also directed that as there is no Assistant State Health Officer, in the employment of the Board, that the First Assistant to the State Health Officer, Dr. Hiram Byrd, shall be detailed to the Executive Office who should exercise the functions of the Assistant State Health Officer under the immediate direction and control of the State Health Officer. This arrangement of office affairs seems to be a very satisfactory one and is favorably commented upon by the State Health Officer in the enclosed report.

This report would scarcely be complete without alluding to the very complimentary resolution which the Boards of Trade and Chamber of Commerce of Tampa, Jacksonville and Key West have passed requesting Dr. Porter to withdraw his resignation and remain with the Board in a capacity and position which he has so ably and satisfactorily filled since the organization of the State Board of Health in 1889. These resolutions, with those from the State Board of Health, were passed in December last and have had the effect to induce Dr. Porter to modify somewhat his request to be relieved and to consent to

remain as State Health Officer for a while longer, and until the Board can with satisfaction to itself and the people of the State select and decide upon his successor. While his resignation is not withdrawn yet he will not insist upon its immediate acceptance, which I feel will be gratifying news to you as well as to the people of the whole State. Particularly is it pleasing to the Board not to be compelled to change executive management at this time when, whether rightly or not, considerable apprehension is felt for the health problem of the approaching hot season.

Very respectfully,

E. M. HENDRY,
President State Board of Health.

JACKSONVILLE, FLA., January 1, 1906.

To the President and Members of the State Board of Health of Florida.

GENTLEMEN:

Herewith is presented for your consideration and I trust approval, the Seventeenth Annual Report of the Executive Office of the State Board of Health, being a narrative of sanitary and health conditions which have prevailed in the State during the year 1905. Indulgence is asked for the desultory manner in which the story of health happenings in the State is told, and the hope is expressed that the rambling character of the talk may be pardoned after hearing that the writer has been almost constantly physically indisposed since returning from Pensacola and that the report has been written under stress and with much inconvenience from bodily pain.

The following information furnished the Executive Officer by the several Representatives of the State Board of Health in the different counties and from other assistants and friends, very interestingly gives the conditions relating to health matters which have influenced the well being of the people during the past year.

JACKSONVILLE, FLA., February 1, 1906.

Dr. Joseph Y. Porter, State Health Officer, Key West, Fla.

DEAR DOCTOR:

I have the honor to hand you herewith my report for the year ending December 31, 1905. Prior to the 24th of July my time was taken up almost exclusively looking after smallpox—of which I make brief mention. From the 24th of July until the 3rd of September, I was engaged at Flomaton, inspecting trains. To this I have devoted some space for the reason that the public generally understands so little of the rationale of quarantine methods.

From the 3rd of September until the close of the epidemic I was engaged in the yellow fever fight in Pensacola. After this was over, we returned to Jacksonville on the 22nd of November, since which time I have been in the office of the State Board of Health. When it is remembered that Mr. Durrance, late Executive Clerk, died rather suddenly in the summer, and that the office in Jacksonville was practically closed for three months during the yellow fever prevalence at Pensacola; and that during that time an office had been temporarily established in Pensacola, a part of the office equipment having been moved there—the Herculean task of reducing this chaotic mass to order, can better be imagined. To add to the already embarrassed state of affairs the time so badly needed to effect a re-organization had to be given to collating data for the annual report—data which could ill be gotten at until the office work was brought up to date. It will be appreciated that under these trying circumstances however rich in material for a report the office might be, it will of necessity appear at a discount for lack of time to embellish it and show it off to better advantage. Simple justice to the office force requires this explanation.

Very truly yours,

HIRAM BYRD,

First Assistant to State Health Officer.

SMALLPOX.

I was engaged from the 28th of March to the 22nd of July looking after smallpox almost exclusively. During this time, a little less than four months, I had the management of one hundred and thirty cases. I shall not, however, in this report, enter into discussion of details of management, for the reason that such a discussion would of necessity be largely a repetition of former Annual Reports. Besides, I desire to economize space in favor of more interesting material. I cannot refrain from saying though that my three years' experience with smallpox,

covering nearly one thousand cases, has taught me to rely more on vaccination, and to abandon more and more that false security which quarantine methods offer.

The following is a tabulated statement of the cases of smallpox treated by counties:

Osceola	12
Polk	57
Hernando	16
Marion	18
Pasco	3
Manatee	10
Alachua	6
Suwannee	1
Lake	6
Columbia	1
Total	130

SANITARY NUISANCES.

In the latter part of May, I was directed to Altoona, Lake county, to investigate and report upon an alleged sanitary nuisance in the form of a decrepit house, more sitting than standing in the center of the little unincorporated town. The house had been abandoned for years, its owner gone and his whereabouts not known. The village swine had kept a trysting place underneath it until the decaying sleepers had dropped the floor through here and there and had almost crowded them out. And the rustic swains of the community, accustomed to meet in the village Saturday's, had appropriated it for a public privy, while bats, rats roaches and cobwebs had taken advantage of its friendly shelter in such numbers that the mixtures of combined odors emanating from the building was anything but wholesome. That it was unsightly and unsavory goes without saying, but the question for me to answer was: "Was it a 'sanitary nuisance'?" That malaria, or typhoid, or smallpox, or any other known disease, could possibly emanate from it, was not for a

*Alleged
sanitary
nuisance at
Altoona,
Lake
County.*

moment tenable. This is the professional side of the question—the scientific. But the Revised Statutes of Florida, chapter 4346, Section 2, says: "That filth, the contents of cess-pools, offal, garbage, foul water, dye water, refuse from manufactories, urine, stable manure, decayed animal or vegetable matter, or other offensive substances detrimental to health, thrown, placed, or allowed to remain, in or upon any private premises, street, avenue, alley, sidewalk, gutter, public reservation, or open lot, within any incorporated city or unincorporated town or village of the State of Florida, are hereby declared nuisances, injurious to health." This is the legal side of the question, and along these lines the answer had to be framed. I therefore declared that in my official opinion it was a "sanitary nuisance," whereupon I was directed by the State Health Officer to put it in a sanitary condition. This I did by having it scoured out "with potash" and nailing up the windows and doors.

Alleged
sanitary
nuisance at
Palatka.

In June I was directed to Palatka to investigate an alleged sanitary nuisance in the form of a guano warehouse, or depository, the odor of which was complained of. After making a thorough investigation, I could see no reason why the State Board of Health should interfere with a business that had been established for more than a decade, and with which a majority of those living nearest it, had no complaint to make. Especially since from a professional point of view, disease could not originate from it.

Alleged
sanitary
nuisance at
New Smyrna.

In June I was directed to New Smyrna to investigate an alleged sanitary nuisance, in the form of a tide-water ditch leading from Turnbull Hammock through the town to Halifax River, and into which a few small sewers emptied. Upon investigation, it was found to be an issue in local politics, and not a question for the State Board of Health to be drawn into.

MOSQUITOES.

During the year I have continued the study of mosquitoes, making such observations as I could, without a fixed

place of abode. These observations have of necessity been superficial, for while this nomadic life affords excellent opportunities to study the distribution of the several species in the State, it precludes the possibility of breeding them out and studying their biological history. At the Annual Meeting of the State Medical Association in April 1905, I read a paper on the Mosquitoes of Florida, which gave a fairly accurate, though brief resume, of our knowledge of the mosquitoes of this State at that time. I insert it in full.

[Reprinted from THE MEDICAL NEWS, June 10, 1905.]

MOSQUITOES OF FLORIDA.

BY HIRAM BYRD, M.D.

of Jacksonville, Fla.;

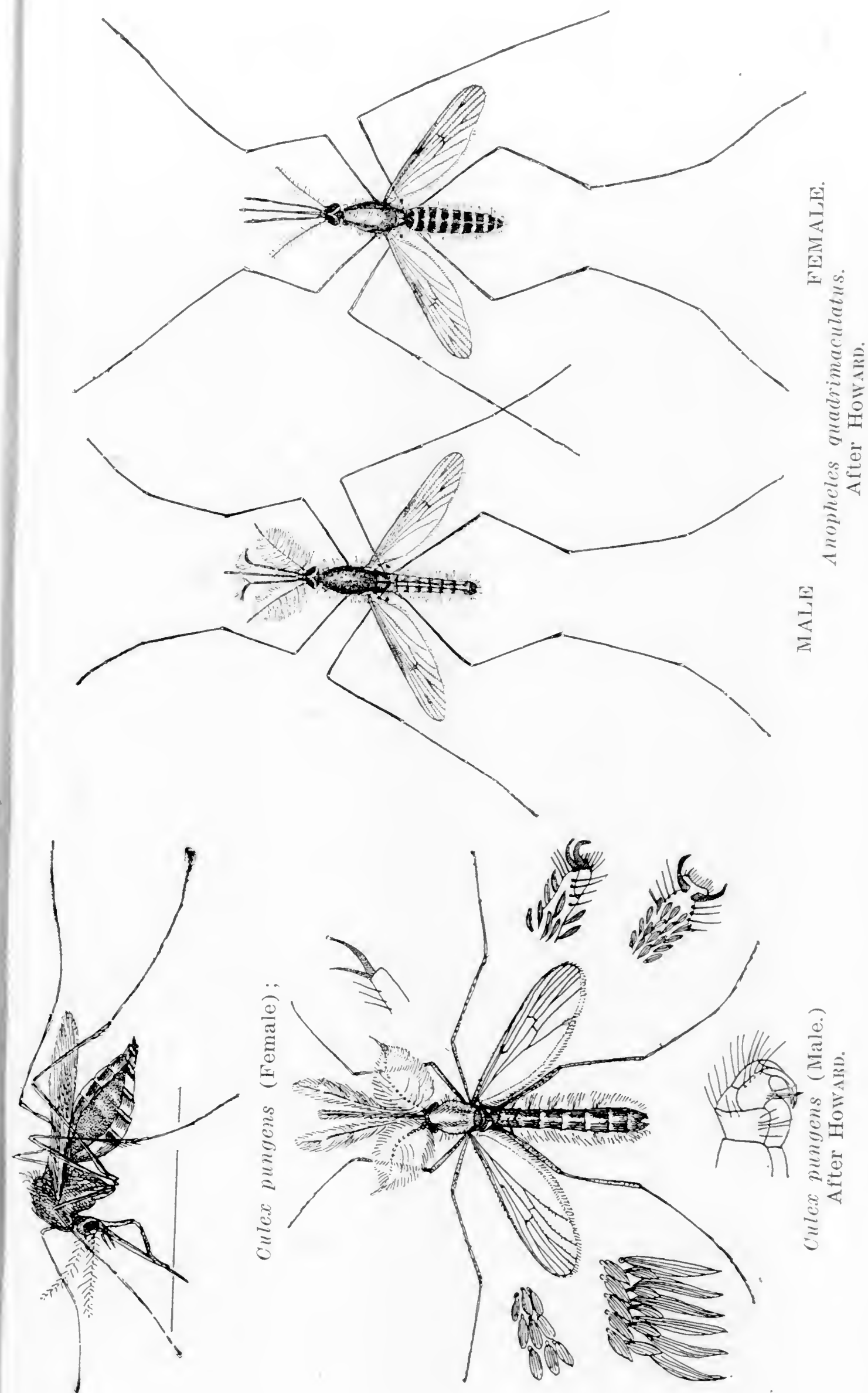
Assistant to State Health Officer.

To the casual observer all mosquitoes look alike, but a more intimate acquaintance reveals some very striking differences both in structure and habits. Some are beautifully marked with white or yellow stripes and bands, some with purple, while some are of more somber hues. Some have long slender legs, others short and stout. The legs of some are smooth, while others are beset with erect scales. Some have toothed tarsal claws, while others are without teeth. Some do not bite at all, some bite chiefly at night, some chiefly in the day, whereas some bite day and night. Some pass the winter in the adult and some in the egg stage. Some deposit their eggs on the water, and others deposit them on the grass or mud, where water is expected to come after rain or high tides. Some lay their eggs singly, others join them together into little batches, or "boats." Some breed only in fresh water, others only in salt. Some are migratory, others are not. Some transmit disease, while others do not. Of those that do, one kind transmits one disease and another another. But although there are many differences, there are also many likenesses, and all mosquitoes agreeing in certain impor-

tant particulars are grouped together as a *genus*. While all mosquitoes of the same genus are alike in most respects, there may be some minor differences. The mosquitoes having the same minor differences are grouped together as a *species*. To illustrate: All malaria carriers have long palpi in both the male and female, and their larvæ have very short respiratory siphons. They constitute the genus *Anopheles*. But all *Anopheles* are not exactly alike. One kind has three black spots on the scales of the last vein, also white bands across the palpi. This is the species *crucians*, and is spoken of as the *Anopheles crucians*. Another of the *Anopheles* has white hind feet. He is known as the *Anopheles argyritarsis*.

It is an unwritten law among naturalists that the first who finds or describes a species names it. Frequently two or more naturalists in different parts of the world describe the same species, each one naming it and each giving it a different name, and later it is found that they both mean the same thing. When this occurs, the species is known by the name given it first and the other names are used as synonyms. To illustrate: A certain mosquito of the genus *Anopheles* was described by Meigen and called *Anopheles maculipennis*. The same mosquito was described by Say and called *Anopheles quadrimaculatus*. It is now known as *Anopheles maculipennis*, Meig., the author's name being added to avoid confusion.

Just how many species there are in the world no one can say, for the reason that new species are being continually discovered, and even among those already known new differences are being found which sometimes transfers a group to another species, or even to another genus, e. g., the *Stegomyia fasciatus* was long thought to belong to genus *Culex*. Lieut.-Col. Geo. M. Giles wrote three years ago, "We have at least 300 (species) whose validity is hardly likely to be questioned. Moreover, as there remain large areas from which no collections have been received, a total of 500 species as the actual total is certainly an underestimate. And I should not be surprised were it found to rival that of butterflies." At the



same time he gave a list from North America and Canada, based upon Theobald's Monograph, but with some additions. This list contained 36 species. New Jersey alone is now known to have that many. Even Florida has some 22 species, and how many yet undiscovered only future effort can determine.

The number of genera, into which mosquitoes have been grouped, is about 25. We have found in our State representatives of eight of these. The *Culex* includes about as many species as all the other genera together, more than 160 already being known. And if any genus may be regarded as the type from which others have diverged, the *Culex* has a very strong claim for that distinction. Selecting, then, the *Culex pipiens* as type of this typical genus, the life cycle is briefly as follows:

Mosquitoes pass through four stages of development—egg, larva, pupa, imago, or full-grown mosquito. However, the eggs may be laid, they hatch only in water; the wriggler and pupa pass their entire existence in water, leaving it only when the imago emerges from the pupa skin. From this it will appear that mosquitoes cannot breed except in water.

Though the wriggler lives in water, he is a true air-breather. Respiration is carried on by means of a respiratory siphon situated on the dorsal aspect of the last abdominal segment—a breathing tube near the end of his "tail." When at rest he floats at the surface, head downward, his breathing tube thrust out of the water. If disturbed, he quickly darts downward, but soon returns to breathe again.

Frequently he may be seen feeding at the surface, and actively turning his head and body this way and that, but always with his breathing tube thrust into the air. At other times he goes down to feed, and may be seen mouthing over dirt, leaves, grass, or whatever happens to be in the water. His food consists of diatoms, desmids, spores of minute vegetable organisms, and minute animal life. He is a very voracious eater, and when food is scarce he will, in some species, eat other wigglers.

He grows fast or slow, according to the abundance of food at his command, the temperature of the water he lives in, etc. In about a week, under ordinary conditions, he is grown, having moulted several times in the interim. He is now ready to change his skin once more, and out comes the pupa.

The pupa looks something like the mosquito with his head, wings, thorax and legs all in a bag. With the change of state his habits also change. He doesn't grow any more, neither does he eat. His breathing is changed so that now it is through two little trumpet-shaped tubes that grow out from the thorax. His body seems to have become lighter. He quietly floats at the surface, except when disturbed. At such times he darts downward, but it is only by effort that he remains below the surface.

After remaining in the pupa stage from sixteen hours to three or four days, he bursts his skin on the back of the thorax and out comes the full-grown mosquito. During the hatching, which takes place in the water, the pupa skin serves as a boat to keep the emerging mosquito from drowning.

If he pass this milestone safely, he unfolds his legs, rests a bit, spreads his wings and flies away.

As this is the reproducing stage, the first thing is the marriage flight, which takes place usually on a still morning or evening. Some species mate in the middle of the day. The *Stegomyia fasciatus* frequently does.

After mating, as a rule, the males do not live long—say, two or three days (?)—and do not necessarily take food. They rarely bite, but may be seen occasionally sipping sugar, molasses, or fruit.

The females, on the contrary, after mating, go in quest of warm blood. It is believed they seek blood for the purpose of maturing their eggs, but it is well known that mosquitoes can, and do, reproduce without tasting blood. Indeed, it is doubtful whether one in a million ever enjoys that luxury. It seems, too, that in some species at least, once the female is fertilized she is always fertile and cap-

able of producing a batch of eggs every time she gets a fill of blood. (See Thompson-Yates Laboratory Reports.)

Culices in Florida.—There are 11 species of *Culex* not known in the State. Nine of these breed only in fresh water, whereas the other two breed in the salt marshes. Of the fresh-water breeders the most common is the *Culex pipiens* or "rain barrel" mosquito. This is the most universally distributed species we have. I have collected mosquitoes at nearly a hundred points in the State, and this is the only species that I have found at absolutely every place.

Among our far northern species, Mr. Howard mentions the *Culex impiger* as abounding in Alaska. It is also a native of Florida. This indicates under what varied conditions some species may thrive. The *Culex scholasticus* is interesting by reason of the fact that the only specimen so far found in America is one that I captured on the Santa Fe River, in Alachua County. The *Culex perturbans* is a not uncommon species, which once seen is easily recognized, and whose larvae are as yet unknown. I once produced a batch of eggs by confining a female in a breeding jar, but none of them hatched. The *Culex serratus*, *Culex triseriatus*, and *Culex confirmatus* I have found only in swamps, and very few there. The *Culex consobrinus* and *Culex nanus* are among the less important species.

The *Culex taeniorhyncus* and *Culex sollicitans* are our two salt-marsh breeders. They differ very materially from the fresh-water breeders, and deserve special mention. They are very much alike, both in their markings and breeding habits. The *sollicitans* is somewhat the larger and is marked with a purer white. The predominating species here is the *taeniorhyncus*, but in New Jersey it is the *sollicitans*. This would seem to indicate that the latter is a more northern species. The former, by reason of its abundance and ferocity, is a great pest along the East Coast. My own observations on this species have been confined to that territory, and I have no data bearing upon its distribution elsewhere in the State.

Dr. John B. Smith, of New Jersey, has made a very careful study of these mosquitoes, and his researches have revealed some curious and interesting facts. In their breeding habits they differ entirely from the other common species of *Culex*. As before stated, they breed only in the salt marshes. They deposit their eggs, not on the water, but on the mud where water is expected to come after heavy rains or high tides. The eggs lie there and dry out till the marsh becomes flooded. When this occurs they hatch, but not all of them. Some dry out a second and third and even a fourth time, and, indeed, some of them pass through the winter to hatch the following spring. This is Nature's method of perpetuating the species. For if they all hatched the first time the marsh is flooded, and if then the water should dry up before they have time to come to maturity, they would be exterminated.

After hatching they grow rapidly, and in a week or ten days have become imagoes. Here is the curious feature: Some of them are males and some are females, and *some are sexually immature females*. For the present we will leave this third class—these neuters, so to speak—and follow the story of the males and females. Soon after hatching they mate and anon are ready to deposit eggs again. By this time also the marsh has dried up more or less and is ready to receive them. They are deposited as before, and dry out as before, and the story continues. From this it is apparent that a continuous dry season would produce few mosquitoes. So also would a continuous wet season. But alternating wet and dry would produce the greatest abundance. It is apparent also that they come in crops, and that these crops appear a week to ten days after heavy rains or high tides. It is also clear that if the water that floods the marsh should be dried up in less than a week or ten days—before the wrigglers could reach maturity,—they would perish, and this not infrequently happens, as a result of insufficient rain—enough falling to hatch them, but not enough to tide them over the wingless stage.

We will now turn to the neuters. As before stated, they are sexually immature females. The breeding instinct is not lost, but transformed into an instinct to migrate. So that soon after hatching they rise up from the marshes in countless millions, and fly, or, rather, drift, away with the wind. If the wind is landward, they fly inland, but if seaward they take that direction. Mr. Smith has found that they sometimes migrate as far as twenty miles, so that habitations near their breeding places will be troubled with them more or less at times.

From a sanitary point of view the genus *Anopheles* stands second to none. They are the malaria carriers. There are about fifty species known. Five of these have been found in Florida. The *Anopheles crucians* is our most common species, but I have not found it by any means abundant. In no instance have I captured more than a dozen specimens in a single day. I have found the *Anopheles maculipennis* at only one point—Kissimmee. The *Anopheles argyritarsis* has lately been found in Key West, but Dr. Porter thinks it was imported there. The late Dr. Murray made exhaustive searches for specimens of *Anopheles*, even offering ten dollars for them, but failed to secure any. As the *argyritarsis* is indigenous to Cuba, Dr. Porter's view seems not at all improbable. Dr. Andrade informs me that he has found the *Anopheles punctipennis* and *Anopheles pseudo-punctipennis* in Jacksonville, but unfortunately no specimens have been preserved.

In their breeding habits, the *Anopheles* differ from the *Culex pipiens* in laying their eggs singly, instead of joining them together into boats. Their wrigglers also, when at rest, float parallel to the surface. They do not fly very far, avoid sunlight, and seldom bite, except at night. They pass the winter as adults, hibernating in the colder latitudes, but they remain active all the winter here. Even their breeding, while it is retarded during our coldest weather, is seldom if ever arrested. And this explains the prevalence of malaria in winter.

The genus *Stegomyia* includes something over twenty species, but only the *fasciatus* is accused of transmitting yellow fever. And this is the only representative of the genus so far found in our State. He is the best known and most widely distributed species of *Culicidae*. He has been described and redescribed and named and renamed until he has been christened no fewer than seventeen times. For a long time he was thought to belong to the *Culices*, and even now there is some dissatisfaction about his classification. This comes from the fact that he is the only species of his genus that transmits yellow fever—a difference which some think should be generic instead of specific.

The *Stegomyia fasciatus* is an inhabitant of tropical and subtropical countries. His limits are pretty accurately marked by the isotherm which forms the northern boundary of the lower austral life zone. This isotherm is determined by Dr. C. Hart Merriam as follows: At any given point, as Nashville, take the mean daily temperature above 6 degrees C. or 43 degrees F. Add them together for an entire year. If the sum amounts to 10,000 C. or 18,000 F., it marks the isotherm in question. The same rule applies in the southern hemisphere. At all points between these two isotherms, where it is not too dry, the climatic conditions under which the *Stegomyia fasciatus* thrives are fulfilled. The whole State of Florida is included within the humid division of this territory, which makes the ideal breeding place of this species. And, as a matter of fact, it is widely distributed throughout the State, being second only to the *Culex pipiens*.

The *Janthinosoma* is represented in Florida by a single species, the *musica*. This is a handsome wretch, rather above average size, with purple abdomen and legs and white hind feet. He is found in swamps and along water courses, frequently in great abundance. He it is that worries fly fishermen probably more than any other species.

The *Psorophora* is represented by the *ciliata*, our well-known "gallinipper." This is the largest species known.

He is mostly of woodland habits, but occasionally ventures even to the heart of our smaller towns.

The *Melanoconion atratus* is a small insignificant species which I captured on the Santa Fe River. So far as I have been able to learn he has not been found elsewhere in America.

The *Wyeomyia Smithii* and *Megarhinus rutilus* are our two others, which bring the total number of species now known in our State up to 22.

Every one knows now that the mosquitoes of the genus *Anopheles* are responsible for the transmission of malaria. But just how it is done is not so generally understood. Briefly, the process is as follows: The hematozoon of malaria develops in the red blood cell, feeding on its contents and growing, just as any other organism would feed and grow. If you can imagine a worm in the heart of an apple, eating and growing till the apple is only a shell and the worm fills it up, you will have a similar process. If you can imagine the worm breaking into ten to thirty pieces, and each piece entering another apple, and living and feeding and growing as the first one did, you will still be following the process. When the hematozoon grows till it fills the corpuscle—when it is grown—it breaks into a variable number of pieces or segments, and the process of breaking out of the old shell and getting into the new is called *sporulation*. It is at this juncture that the patient has the chill. In tertian fever this sporulation takes place every forty-eight hours. In another two days they are grown and sporulate again, and another chill, and so on. From this it will be seen that if a patient has two crops maturing on different days, he will have a chill every day—a double infection.

It will be noticed that the above method of reproduction is without sex. Each individual germ, independent of every other, produces ten to thirty of its kind by breaking into so many segments. This asexual method of reproduction has for its object the increasing of the number of individuals. It prevails to a greater or less degree

in all the lower animals and plants. But the malarial parasite, in common with many other organisms, has another means of reproducing—a sexual method. It is this sexual method that continues the story.

When the hematozoon growing in the red blood cell reaches maturity and sporulates, as before said, it breaks into ten to thirty segments. Now these segments are of three kinds, namely, male, female, and the asexual forms that go on reproducing, in the blood. As we have already seen what the asexual forms do, it now remains to see what becomes of the sexual forms—male and female. When sporulation takes place and all three forms are set free in the plasma of the blood, the sexual forms, like the asexual, proceed to enter other blood cells and feed and grow. But they do not sporulate. Their function is to disseminate their kind, to reach other hosts. And as they have adopted the mosquito as their intermediate host, they lie dormant till taken into the mosquito's stomach. Now when an *Anopheles* bites an individual thus infected with malaria, he takes into his stomach a great number of red blood cells. Some of these contain no germs at all, some contain the asexual, and some the sexual, both male and female. The blood cells are digested. So also the asexual germs. Not so the sexual. Instead they proceed to unite, the males with the females—to mate, if you please. In this act of conjugating the male and female elements fuse together, making a new body. This body now penetrates the stomach wall of the mosquito and here becomes embedded, forming a minute tubercle. By and by this tubercle breaks down, setting free in the body cavity of the mosquito a host of minute organisms, called sporozoites. These get into the salivary glands of the insect, and when the mosquito bites another individual some of them are injected and proceed to enter red blood cells and grow and reproduce, and the story is repeated.

As before said, it is well known that mosquitoes transmit malaria and yellow fever. It is equally well known that they transmit the *Filaria sanguinis hominis*.

They are also accused of transmitting the *trypanosoma* and the specific cause of dengue. Among the lower animals they transmit a disease of swallows similar to malaria. It is thought also that they transmit a certain dog disease of the *hematozoon* class. And it is altogether probable that diseases among cold-blooded animals may prove to be transmitted in the same way. There is an infinity of investigating yet to be done along these lines.

Some species, as our salt-marsh breeders, pass the winter in the egg stage, the adults dying when the weather gets cold, but leaving a bountiful supply of eggs deposited in the marshes ready to hatch out when the spring rains come. Others, as the *Anopheles*, pass the winter as adults. In the colder latitudes, with the advent of winter, the gravid females seek shelter in closets, cellars, barns, and other protected places, and go to sleep. When the warmth of spring returns they wake up and set about repopulating the mosquito world. But I am convinced that the commoner species rarely, if ever, hibernate in this State—especially the southern part. During the winter just past, I found them out, not only through the winter months, but during the coldest of the weather. On two successive nights the thermometer went to 20 degrees F., and on the intervening day my wife captured a large active specimen of *Anopheles crucians*. The thermometer then stood about 35 degrees F. During the same cold spell I captured several other specimens of *Anopheles*, as well as *Stegomyia fasciata* and *Culex pipiens*. It is true they were not so abundant as when the weather was warm, nor were they so active, and if the temperature had remained low for any length of time they would, in all probability, have gone into hibernation. I also found active *Culex* wrigglers in January, but was not privileged to see them hatch. But on February 13 I found grown *Culex* wrigglers which were collected and hatched in breeding jars.

It has been definitely settled by Dr. John B. Smith, of New Jersey, that our two salt-marsh breeders are migratory, that they will fly 20 miles or less from their

breeding places. Whether there are other species that migrate is yet to be determined, but it is certain that most of our commoner species are of very local habits, seldom flying more than a few hundred feet or yards at most from where they hatch. It is very important therefore for exterminating purposes to determine just what species we have to contend with and how far they fly, for it is evident that in order to clear any given community of mosquitoes they must not be allowed to breed within a radius equal to the distance they may fly.

How long do mosquitoes live is a question often asked. It is not easy to answer, for the reason that in confinement they may not live their allotted time. And the span of life is probably greater in some species than others. The *Stegomyia fasciatus* has been kept alive for five months. So has the *Culex*. Mr. Smith thinks that the average life of our commoner *Culices* is some three or four weeks, and that *Anopheles* live somewhat longer. It is certain that they live long enough to reproduce their offspring, and that they breed fast enough to maintain the abundance, and that they bite often enough to transmit disease. And these are, after all, the vital facts.

Mosquitoes, like most other insects, and indeed, most of the lower organisms, reproduce very rapidly and would, if unchecked, overrun the earth in a very little while. But nature provides checks and counter-checks for such rapid multiplication. Whether there are any creatures that prey upon the eggs or not, it is certain that a large per cent. of them never hatch. In the larval or wriggler stage they have many enemies. Minnows eat them, the larvæ of dragon-flies and beetles eat them, disease attacks them, fungi get on them and kill them; they die for lack of food, they sometimes eat one another, they get entangled in threads of spirogyra or under floating leaves and drown. The water dries up before they are grown and millions of them perish in this way. Finally, when they are ready to emerge from the pupa, the cast-off skin serving as a boat for the casting to take place in, frequently capsizes and the mosquito dies at the very

threshold of existence. And those that do hatch successfully now have to take their chances among dragon flies, bats, lizards, toads, night hawks, and a host of other enemies.

Suppose that some progressive energetic town desires to get rid of mosquitoes, how will it go about it? Manifestly, the first thing is to determine what the prevailing species are, and where they breed. The State Board of Health may lend assistance here. This determined, it remains to control these breeding places. By far the greater number will be found to be neglected vessels of water on private premises, such as tanks, cisterns, rain-barrels, watering troughs, sagging gutters; even the water pitcher in the spare room may breed mosquitoes enough to supply the whole household. Let the council make it the duty of every citizen to keep his own premises clear of wrigglers, imposing, if necessary, a small fine for neglect of this duty, in order to make it effective.

Troughs and pitchers and vessels that can be emptied once a week need that only. Cisterns and tanks can be screened so that the mosquitoes can't get to them to lay their eggs. Or they can be oiled.

In addition to this, let every household have its artificial breeding place—a pail of water set in some shady place in the yard. Mosquitoes will come to it to deposit their eggs, instead of going to some place where they would be difficult to find or get at. These traps will catch most of the eggs to be deposited about the place. And as they require about ten days to come to maturity, the pails need only be emptied once a week and refilled. But they serve a better purpose still than merely an artificial breeding place. They will be a most potent factor in education. They are so many aquaria where every man, woman, and child will acquire a practical knowledge of the breeding habits of mosquitoes—will come to know the eggs, the larvæ, pupæ, the time they require to hatch, the wherefore of exterminating them, and then, instead of having a few enthusiastic workers, the whole town will become enlisted and the mosquito is doomed.

Breeding places around town are to be controlled by the city authorities. Some places can be filled up. Others can be ditched. Fish can be introduced into some, or duckweed, and so on. The ingenious American will find ways and means if only he enlist in earnest.

To control the salt-marsh breeders is a State problem and cannot be discussed here. Nor does it concern places without the range of their migration—say, 20 miles or more from the coast. Nor need it deter any place from waging war against its local mosquitoes, thereby getting rid of disease carriers.

In conclusion, permit me to say that the time is coming, and not far distant, when the toleration of mosquitoes will be a municipal crime. That they can be controlled is no longer a question, but a demonstrated fact, and it now remains with us to decide whether we will be leaders or followers in this beneficent crusade.

Addendum: I have since found the *Culex sollicitans* breeding in a fresh water gully fifty miles from the coast. This may be the *sollicitans* studied by Mr. Smith in New Jersey, or it may be a closely allied species. The latter seems more probable.

The *Culex*
Sylvestris.

Since then the larvae of one more species, the *Culex Sylvestris*, were discovered and bred out by Dr. Pierpont and myself at Pensacola. This brings the total number of known species in the State up to twenty-three.

During the prevalence of yellow fever, I submitted to the State Health Officer "Some Observations On The Biting Habits of The *Stegomyia fasciata*." Dr. Porter in turn sent it to Dr. Guiteras, who commented on it kindly, after which Dr. Porter had it published. It is as follows:

THE STEGOMYIA FASCIATA.

BITING HABITS.

Next to knowing at sight the mosquito himself, nothing is more important than to know the biting habits of the *Stegomyia fasciata*. I have seen very little literature upon this particular phase of mosquito lore, and that lit-

Stegomyia
Fasciata.

tle is contradictory, part claiming that he bites chiefly in the day time, and part that he is of purely nocturnal habits. It is the purpose of this article therefore to state the conditions under which he bites and does not bite, as I have observed them myself, and to interpret certain well-known phenomena.

Only the females bite and these not until after they have mated. Having once mated they are always fertile, and, though they may deposit during life several litters of eggs, they do not need to mate a second time.

After mating, the females go in quest of blood. When they bite, they fill the stomach very full. They will not bite any more now until that is all digested. This takes two or three days when the weather is warm, but when it is cool the vital processes are a little slower, and it takes somewhat longer.

The *Stegomyia fasciata* have two daily mating periods; one in the morning, which lasts from early dawn till nine or ten o'clock, and one in the afternoon, which lasts from four or five o'clock till dark. More mate in the morning than do in the afternoon. They occasionally mate at all hours of the day, particularly if it be cloudy and still.

They begin biting also at early dawn and by nine or ten o'clock the biting has reached its height. So it continues till they have become sated or till the afternoon draws on. After five or six o'clock the biting subsides in a measure but does not completely cease till night. If they ever bite in the dark it is the rarest exception. It is to be added just here that during the noon hours of our hottest and brightest days the biting subsides a little.

And though they bite only in the day, they assiduously avoid sunlight. I doubt if one ever makes an attack, no matter how hungry, where the sun is shining, or even venture into sunlight when it can be avoided. If taken into the sun in captivity, they become restless. Even in the wriggler and pupa stages they seek the shadiest part of the vessel. Not only do they avoid the direct light of the sun, but they also avoid bright sky-light, creeping up

Biting

insiduously on the shaded side, when they go to make an attack.

They likewise avoid the wind, seldom attacking even in a moderate breeze and then always on the leeward side.

They are also shy of motion—easily driven away but persistent to return.

Upon the whole, the *Stegomyia fasciata* is the most wary mosquito with which I am familiar. Choosing his point of attack, as before stated, on the shaded side, he carefully reconnoitres the grounds, apparently weighing the chances of trouble against the delights of the feast, before he ventures to light. And finally when he does light, he does not proceed at once to bite, but waits, watching to see if he is observed. During this waiting, watching, his hind legs slowly curl back and forth over his back. At this time he is most difficult to capture. Finally, when he considers all safe, he begins feeling around with his proboscis for a suitable place to make the puncture. Then he stops again and watches, then proceeds again. The least movement on the part of the victim will frighten him away instantly.

Now, it is a well known fact that during an epidemic of yellow fever, people may visit the stricken city in the day time and by leaving before night enjoy a relative safety. These two facts seem to contradict each other, for if the mosquitoes bite in the day time instead of the night, how is it that one takes less risk going into an infected territory in the day time than he does to spend the night there? To answer this perfectly rational inquiry requires that several things be borne in mind, not only concerning the mosquito's habits, but the individual as well. As a rule only men take such risks. They take their families away and keep them away. They, too, stay away at night. They go to town in the day to attend to business, but leave again with the greatest possible despatch. Most men smoke. Especially is this true in the presence of disease. Smoking helps to keep the mosquitoes away. They attend to business in a hurry. This keeps them on the move. It has been pointed out above

that the *Stegomyia fasciata* will be frightened away by the least motion. A good portion of the man's time is spent in the open air—the breeze is protective. And while in the sunshine they are practically safe, for, as has been seen above, the *Stegomyia fasciata* avoids sunlight. Furthermore, when a man voluntarily takes such chances on account of business interests he keeps as well out of the infected district as possible. Now with all these factors working in his favor the chances are that he will escape, but occasionally he is overtaken in spite of them all.

On the other hand, an individual spending the night in infected territory takes great risk, because the mosquito bites until night and begins early in the morning, and the sunlight, which is a restraining influence, is wanting in the evening; and the mosquito is active long before the individual wakes in the morning. Indeed it is not unlikely that more infections take place at this early hour than any other time of the day. At that time there is usually a dead calm and the light is not too severe, and the slumberer lies motionless—the happiest combination conceivable for the fastidious habits of the fellow fever carrier.

YELLOW FEVER.

About the 1st of September, I was transferred to Pensacola to assist in the yellow fever situation. At that time there had developed but three or four cases and every effort was being made to stamp it out before it got well planted. Dr. Anderson had been assigned as diagnostician and I was directed to assist him in locating cases. A house to house inspection was made and every case of sickness of whatever nature noted. These inspection reports were turned over to me. I called upon every person reported sick. Where yellow fever could be positively excluded I called no more. Those that were regarded as suspicious I called upon a second time, making a positive diagnosis in typical cases and turning the doubtful ones over to Dr. Anderson.

In the meantime I had charge of fumigation of freight cars. It is to be noted just here that the first three cases of which any knowledge was had occurred in the Greek quarters, and hoping that that was all the infection in the city, some eight blocks in the vicinity of these cases were cordoned and known as "infected territory." The railroad passed through the centre of this district. All cars loaded or unloaded in the infected territory were fumigated before being taken away. This was done, of course, with the idea of killing any infected mosquitoes that might have taken refuge in the cars. Finally when the infection became general, the whole city was regarded as infected and all freight cars leaving there were fumigated at the request of Alabama and of the Governor of Florida.

I also had charge of the mortuary statistics. The first case of yellow fever reported was August 29th. A few undoubted cases that occurred prior to this date were afterwards ferreted out. They occurred with great irregularity until September 20th. During this time the public was kept informed by bulletins—issued by the mayor three or four times a day—at irregular intervals. This caused more or less confusion and from the 20th of September on, at the close of each day, the State Health Officer issued a bulletin of the day's happenings. These daily bulletins, I have taken, and at the suggestion of Dr. Porter, elaborated into an epitome of events connected with yellow fever throughout the country.

DOCTOR R. F. GODARD,

SECOND ASSISTANT TO THE STATE HEALTH OFFICER.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

DEAR DOCTOR:

Herewith I enclose a summary report of my work as assistant to the State Health Officer of Florida for the year 1905. I have tried to give in detail every occurrence

I have been directed to attend to, as well as the specific diseases which have been supervised.

During the year I have been directed to go on twenty-seven details exclusive of the one which called me into the quarantine service against yellow fever. Elsewhere you will note my special report on my quarantine service and also time occupied therein.

I also wish to call your attention to the tabulated table which I have arranged in my annual report which shows each county to which I was directed, the dates of arrival and discharge, the specific disease or cause for which I was detailed, the number of cases of sickness managed, race of patients, and fatalities, together with the source or State from which the infection in each case was imported.

On January 1, 1905, I had charge of outbreaks of smallpox in Jefferson, Jackson and Walton counties, but on January 4, 1905, I was directed to leave the occurrence in Jefferson county in Dr. W. M. Stinson's care as he had been directed to that point for that purpose. At this time it was very necessary that I give more of my time to another county.

On January 5, 1905, I returned to Marianna, Jackson county, for the purpose of investigating two suspicious cases of an eruptive malady which were reported near that town. These cases proved to be eruptive troubles of minor importance so I immediately resumed my work near Campbleton.

Jackson
County.

From the above date the outbreak of small pox in Jackson county came under control and was with few exceptions at no time threatening.

On February 27, I was able to discharge the situation in the vicinity of Campbleton after having seventeen cases to develop and run their course since January 1, 1905.

Jackson county, February 2, 1905: On this date I was directed to investigate the nature of an eruptive disease which was in two white families who lived in the above county about fifteen miles north of Marianna. I found four cases of smallpox and about that number of

Smallpox
Jackson
County again.

COUNTY	Date of Charge	Date of Discharge	DISEASE	No. Cases	White	Colored	Fatalities	SOURCE	REMARKS
Jackson	1- 1-05	2-27-05	Smallpox	17	8	17	0	Alabama	
Jackson	2- 2-05	2-26-05	Smallpox	8	15		0	Alabama	
Santa Rosa	1-12-05	1-12-05	Smallpox	15	19		0	Alabama	
Santa Rosa	1-14-05	1-14-05	Smallpox	19	1		0	Alabama	
Walton	1-15-05	1-15-05	Smallpox	1		3	0	Mississippi	
Gadsden	1-16-05	2- 8-05	Smallpox	3		9	0	Florida	
Gadsden	1-22-05	2- 9-05	Smallpox	9					
Gadsden	1-25-05		Chicken Pox						
Jackson	2-17-05		Chicken Pox			13	0	Mississippi	
Gadsden	2-28-05	4- 5-05	Smallpox	13		11	0	Florida	
Gadsden	3- 2-05	4-11-05	Smallpox	11		12	0	Alabama	
Jackson	3- 8-05	4-29-05	Smallpox	12		1	0	Alabama	
Holmes	3- 8-05	4-10-05	Smallpox	1		1	0	Alabama	
Alachua	4- 7-05	4- 7-05	Smallpox	1	5		0	Georgia	
Hamilton	4- 9-05	4-25-05	Smallpox	5	7		1	Florida	
Columbia	4-15-05	4-26-05	Smallpox	7		1	0	Unknown	
Gadsden	4-20-05	5- 8-05	Smallpox	1	4		0	Alabama	
Santa Rosa	5- 4-05	5- 8-05	Smallpox	4		4	0	Mississippi	
Jackson	5- 5-05	5-25-05	Smallpox	4	4		0	Florida	
Columbia	5-12-05	5-14-05	Smallpox	4		7	0	Alabama	
Gadsden	5-19-05	6- 9-05	Smallpox	7	2		0	Alabama	
Gadsden	5-23-05	6-30-05	Smallpox	2					
Washington	6- 2-50	6- 3-05	Sanitary						
			Nuisance						
Gadsden	6-25-05	8- 1-05	Smallpox	10	10		0	Georgia	
Gadsden	6-28-05	7- 5-05	Smallpox	1		1	0	Unknown	
Jackson	7-27-05	7-27-05	Sanitary						
			Nuisance						
Hamilton	8- 3-05	11-12-05	State		2				Yellow Fever
Walton	11-20-05	12-15-05	Quarantine	6		4	0	Georgia	
			Smallpox						
				161	77	84	1		

non-immune persons who had been exposed. Immediately I isolated the cases and quarantined all the members of each family. Afterward, all the exposed persons referred to developed the contagion. This infection has been imported from Florala, Alabama, in a very unusual way. A white family which had resided in Florala had one case of smallpox and had occasion to move into the above vicinity two months later. They, for convenience, left a couple of blankets and a bundle of quilts rolled up at the residence in which the first case of smallpox developed and as a result the eight cases developed. It was said that these articles had been fumigated but smallpox developed just fourteen days after they were left in this non-infected residence. The situation was discharged on February 26, there having been eight cases in all to develop.

January 12, I was directed to Santa Rosa county for the purpose of investigating some reported cases of smallpox south of Milton. I found that an oyster dealer who had been conducting a restaurant in Florala, Alabama, had contracted smallpox there and had come home to suffer of the attack. He lived on Escambia Bay, twelve miles south of Milton, where several other families together with his had been exposed to the contagion. As a result of these numerous exposures there were fifteen cases to develop, all among white people. At the time I visited the locality they were all well and had completed the stage of desquamation, therefore, as soon as a fumigation was done I discharged the situation.

January 14, 1905: I investigated the report to the effect that smallpox was prevalent in Santa Rosa county fifteen miles north of Milligan in the vicinity of Oetehita Postoffice. After investigation I found two white families had been infected from a general prevalence which was existing at that time near Wing, Alabama, and as a result nineteen white people had suffered of the contagion. These people lived nearly five miles from any other settlement and therefore did not threaten to infect any other community; so I advised strict isolation and dis-

Smallpox
Santa Rosa
County.

charged the situation. This would not have been done but for the fact that there were no other persons exposed than those who had suffered of smallpox.

On January 15 I returned to Paxton in Walton county to review the smallpox situation there which had been under my care since November, 1904. I found that every infected residence had been carefully disinfected and fumigated according to my directions, therefore I discharged the situation. By reference to my report of 1904, it will be seen that this town had suffered from an epidemic of smallpox imported from Florala, Alabama, but there was only one case to develop after December 31, 1904.

Smallpox
Walton
County.

Smallpox
Gadsden
County.

I was in Quincy on January 16, when a physician reported that a colored woman who had been employed in a tobacco packing house with about one hundred and ten others, was suffering of a suspicious eruptive disease. On investigation I found it to be smallpox and it did not require an expert to forecast the results of this infection if a thorough vaccination was not done. I immediately quarantined the patient in her home with her mother. Then in company with the city marshal I went to the packing house and vaccinated the employees numbering in all one hundred and fourteen. There was only one other case to develop and that was the mother of the woman who had first developed it. I traced the infection to a negro who had just come in town two weeks previous to the above date, from Gulf Port, Mississippi, and gave a history as well as showing the scars of having suffered of smallpox only a few weeks since. On February 8, after a thorough disinfection and fumigation, I discharged the situation after having only three cases to develop. I had to employ a watchman and nurse in attending to these cases, owing to the fact that I could not isolate them perfectly otherwise. Also, had to furnish provisions and wood for the family during the three weeks of disagreeably cold weather.

On January 22, two colored families residing in Gadsden county out six miles east of Quincy, were

reported as having an eruptive disease of a suspicious nature. After a thorough investigation I found they were suffering of smallpox and that seven in one family and one in another had already developed the contagion. I immediately quarantined both families and vaccinated all exposed parties who could be got to. Some of the members of these families had been exposed to smallpox in Jefferson County in December 1904 and on their return to Gadsden developed it. On February 9th I discharged the situation after a thorough disinfection and fumigation of the infected residences.

Two suspicious cases of an eruptive disease were reported in Gadsden county on the tobacco plantation of Schraeder & Arguimbau, which is situated about two miles north of Quincy. After investigating the trouble, found it to be varicello.

Having been informed of a suspicious case of disease at Cypress, Jackson county, I proceeded there on February 17th to investigate. I found it to be varicello.

Dr. B. F. Barnes of Chattahoochee, Florida, Gadsden county, reported smallpox in two colored families and on February 28 I was directed to take charge of the same. I traced the source of contagion to Bond, Mississippi, from which place it had been imported some weeks previous to its discovery. I immediately quarantined these two families and vaccinated all who had been directly exposed. As a result, on April 5th I was able to discharge the situation after having had only one case outside of these two families. In this outbreak, I had thirteen cases, all of whom were colored.

Smallpox
Gadsden
County.

I was directed to again investigate some suspicious cases of disease among negroes in Gadsden county, east of Quincy six miles, on March 2. The trouble proved to be smallpox and was traced to the local outbreak in that vicinity in January, 1905. These negroes had been exposed and did not allow the information to get to me. The infection was imported from Jefferson county as reported by me in January. During this outbreak I had nine cases of smallpox before it could be stamped out.

In the meantime I had one case to develop in the town of Quincy. The case was immediately isolated and quarantined and all exposed persons carefully vaccinated. As a result, I did not have another case to develop from this infection. On April 11 I discharged the situation after having had eleven cases to develop, all of whom were negroes.

Smallpox
Jackson
County again.

I was directed to proceed to Graceville, Jackson county, and investigate some reported cases of smallpox in that vicinity. In company with Dr. R. N. Phillips, of Graceville, I found a colored family of nine, all of whom had suffered of smallpox and were then about well. I had the house of these negroes thoroughly disinfected and fumigated and then discharged them. We also found one other colored family in the immediate vicinity which had been exposed and had two cases to develop in it. Only one other case developed however, before I stamped the trouble out entirely. On March 29 I discharged the situation with only the number of cases mentioned to develop. In this section there had been numerous exposures and the only way I could stamp out the trouble was to make a house-to-house canvass and vaccinate every person I came to. I had the co-operation of that esteemed gentleman and physician, Dr. N. R. Phillips, in all this work.

Smallpox
Holmes
County.

There was a case of smallpox reported to me in the county prison of Holmes county on the 8th day of March. On investigation I found that a negro murderer had been lately captured who had been in Alabama where smallpox was prevalent and after his imprisonment in Westville, had developed smallpox. In the prison were two other prisoners and the jailer's family, all of whom I carefully vaccinated and quarantined the jail until the situation could be discharged. Dr. Lee, the local physician of Westville, kindly consented to take the situation in hand and I returned to Jackson county where I was then engaged. I ordered, and it met the approval of the county officials, that all new prisoners be carried to

DeFuniak Springs for imprisonment until the situation at Westville was safe.

Pursuant to orders, I proceeded to Waldo, Alachua county, for the purpose of investigating a case of smallpox which had been reported at that place. In company with Dr. J. M. Boning, I examined the case and found it to be smallpox. I immediately quarantined the house and arranged with Dr. Boning to superintend the case. There had been no exposures to this negro who was suffering and the source of contagion was doubtful. It is fair to state that the contagion must have been gotten in a phosphate camp located near Williston, as the negro had been recently employed there.

Smallpox
Alachua
County.

The State Health Officer gave me instructions to proceed to Jennings, Hamilton County, on the 9th of April, for the purpose of taking charge of some cases of smallpox which had been reported as existing at that point. On my arrival I found that a white family in town had been infected from some negroes who were recently from South Georgia and who had been suffering of smallpox. The first case in the white family was so light that it had not been diagnosed and consequently the disease went through the family. I at once quarantined the place and vaccinated all who had been exposed. As a result, on April 23rd, I discharged the situation after having only five cases to develop.

Smallpox
Hamilton
County.

I consulted Dr. D. Cone of Benton, Columbia county, on April 15 and was shown two white families in that vicinity in which smallpox was prevalent. The infection was traced to a point near Lake City, Fla. By prompt vaccination of exposed families in the vicinity I was able to prevent a spread of the disease. In one of the families mentioned I had four cases and in the other three cases, to develop. One of the cases in the latter proved fatal. On April 26 I was able to discharge the situation after having the seven cases mentioned.

Smallpox
Columbia
County.

On April 20 I was instructed to proceed to Quincy, Gadsden county, and take charge of a case of smallpox which had been reported at that place. On my arrival I

Smallpox
Gadsden
County again.

found the case well isolated but there had been a number of exposures which demanded an extensive vaccination in the quarters where the case was located. I therefore vaccinated all within reach and as a result succeeded in stamping out the contagion at once. Only the one negro suffered of smallpox at this time and he was discharged by me on May 8th after a thorough disinfection and fumigation of his house. The maintenance of the patient and his wife during the illness and the time it was necessary to quarantine, cost the State Board of Health only a few dollars. I was never able to trace the origin of the infection.

Smallpox
Santa Rosa
County again.

On May 4 I was instructed to proceed to Milton, Santa Rosa county, and diagnose a suspicious eruptive disease which was then prevalent in that town, in order that the community might be protected. On investigation, I verified the diagnosis of Drs. McKinnon and Eldridge which was that of smallpox. I found that there had been very little care used in preventing a spread of the disease. It was then in a prominent white family and no restrictions whatsoever were being observed. Up to the above date there had been four cases to develop, all among the white people. I therefore gave the family definite instructions as to what is demanded of them under the circumstances and left the situation in the care of Dr. Eldridge as he was at that time their attending physician. I traced the source of infection to Florala, Alabama.

Smallpox
Jackson
County again.

Pursuant to standing orders I took charge of some cases of smallpox at Marianna, Jackson county, on the 5th day of May which had been in charge of Dr. Theop. West, the efficient representative of the State Board of Health in Jackson county. In a colored family which resided in town, there was one case. It had been quarantined and all exposed persons vaccinated by Dr. West; therefore I did not have another case to develop from it. In another colored family living three miles west of Marianna, there was another case which had been quarantined by Dr. West and on my arrival we immediately proceeded to vaccinate all the colored people in the com-

munity. As a result of this method, I had only one other case to develop and this was the wife of the negro who had first developed the contagion. On May 16 I discharged the family in the town of Marianna to which I have referred, after having had only one case. On May 26 the family out in the country was relieved of quarantine restrictions after the two cases recovered and the premises thoroughly disinfected. During the quarantine restrictions both those families had to be supplied with provisions at the Board's expense. The source of the infection was traced to a tramp negro who recently had come from the State of Mississippi.

On my arrival at Lake City, Columbia county, on May 12, I learned that my mission was to take charge of some cases of smallpox in a white family residing six miles east of town. An investigation showed it to be a continuation of an outbreak which was under the care of the Board some weeks previous to date above mentioned. I found four cases in the family mentioned, one of which was critically grave just at that time. I found the family well isolated and there had been no exposures so far as I was able to ascertain. After quarantining the family and rendering them the necessary medical attention, I was directed to turn the situation over to one of our representatives and return to Marianna where I was then engaged.

Smallpox
Columbia
County again.

On May 19, Dr. B. F. Barnes of Chattahoochee. Gadsden county, reported a number of cases of smallpox among negroes which had been discovered by him about three miles west of River Junction. On investigation, I confirmed his diagnosis and quarantined the infected family. I also vaccinated all exposed members of the infected family, along with those in the community who had been too near the place. Fortunately, there was no spread from this focus of infection and after seven cases had developed and successfully recovered, I ordered a wholesale disinfection and fumigation and discharged the situation June 9. The source of infection was easily traced to Florala, Alabama.

Smallpox
Gadsden
County again.

While in Chattahoochee, Gadsden county, on May 23, I discovered a case of smallpox in a white family six miles south of that place. One of the members of the infected family was in town for medicine and I immediately instructed him as to what was expected of him. On visiting the family, I vaccinated the other members and all exposed persons accessible. Only one other case developed from this infection, consequently on June 30, the situation was relieved of quarantine restrictions. The source of the infection was traced directly to Dothan, Alabama.

Sanitary
nuisance
Washington
County.

The State Health Officer directed me to go to Chipley, Washington county, June 2, and investigate the sanitary condition of the town. After looking over the field it occurred to me that in order to do myself justice and to be fair with the town and citizens of Chipley, I should be forced to condemn many sanitary nuisances which were then being maintained within the incorporate limits. There were several ponds located within the town limits which had been drained up to a few months previous to my inspection but were then sadly neglected. I also found horse stables, cow stalls and pens, hog pens, together with neglected closets, indiscriminately maintained around the most thickly settled portion of the town. A very unnecessary nuisance in the way of permitting old boxes, paper, decaying vegetable and animal matter, to exist promiscuously on the principal streets and alleys of the town. I suggested a general cleaning up of these insanitary quarters and a thorough drainage of the ponds. I also suggested the need of an ordinance prohibiting the maintenance of such nuisances within the town limits, as are above mentioned.

Smallpox
Gadsden
County again.

Dr. O. G. Gardner of Greensboro, Gadsden county, reported a few cases of smallpox near Sycamore post-office which is situated about fifteen miles southwest of Quincy. On June 25 I proceeded to this place for the purpose of taking charge of this situation. I found five cases in a white family and quite a number of exposures. The family was accordingly quarantined and all exposed

persons vaccinated. Fortunately the family were white people and gave us a hearty co-operation in every detail in order to assist in stamping out the infection. On July 19 the situation at Sycamore was discharged as safe.

From the same source from which the above cases were contracted, there sprang into prominence what threatened to be a general epidemic of smallpox in and around the town of Chattahoochee, Florida. Three white families had become infected and had simultaneously developed the infection. Owing to the prominence of the families there was necessarily quite a number of exposures which received a thorough vaccination and constant vigilance. Dr. B. F. Barnes had seen the first case develop and immediately reported the trouble. I took the situation in charge on June 27 and after a thorough investigation, learned that there had been a family from Bainbridge, Georgia, visiting these families in Chattahoochee, who were suffering of smallpox and consequently infected all with whom they came in contact. Owing to the location of the Florida Hospital for the Insane at Chattahoochee and also the fact that several of the employees of the institution had been exposed, the situation was considered extremely grave. On August 1 after having had one case in each of the two infected families and two cases in the other, I was again able to pronounce Gadsden county free of smallpox. It was gratifying too, to note how easily a situation which assumed such threatening proportions at one time, was controlled. This was due to the co-operation of Dr. B. F. Barnes as well as to the vigilance of the physicians at the Hospital for the Insane.

On June 28, on one of the streets of Quincy, I found a negro walking around who was suffering of a well-developed case of smallpox. I had him arrested and put him out in a tent some distance from any residence, on the south side of town. I quarantined him there and kept him at the expense of the State until he was safe to disinfect and discharge. The day I found him he was in the 8th day of the eruption, hence he had exposed a great

Smallpox in
Quincy,
Gadsden
County.

number of persons. I took the city marshal and went into the section of town where the negro had been living and vaccinated every resident. In this way I prevented the development of a single other case. On July 5 I discharged the situation without ever having been able to trace the origin of infection.

Sanitary
condition at
Cypress,
Jackson
County.

Instructions were given me to go to Cypress, Florida, Jackson county, and investigate the sanitary conditions of the place. It seems that there had been a great deal of complaint made of a pond which existed near the central portion of the town. This pond was formed by a dam having been built across a stream which passed through one side of the town. After investigation, I found that the pond was not responsible for the unsanitary condition existing at that time. It did furnish a very fertile place for mosquitoes to breed and for this reason I suggested that it be oiled with coal oil once or twice a week until winter and then ditched and drained.

Yellow fever
quarantine.

On August 2, 1905, I was directed to proceed to Jasper, Hamilton county, and establish and maintain a rigid quarantine against all points infected of yellow fever at that time. A detailed account of my service at this point is to be found elsewhere in a separate report on the yellow fever epidemic of 1905. I was directed by Dr. Joseph Y. Porter, State Health Officer, to discontinue quarantine at twelve o'clock on the night of the twelfth of November, 1905, and proceed to Quincy for further orders.

Smallpox
Walton
County.

On November 20, I was directed to go to Deerland, Walton county, and investigate a suspicious eruptive disease which had developed in the family of a turpentine operator at that place. I found his wife suffering of smallpox which she developed on November 8 and had exposed her husband, brother-in-law and two colored servants. I quarantined the infected place and vaccinated all exposed persons. By the 25th all exposed persons, with one exception, had developed smallpox as I had expected and two other servants had been exposed to the infection. At this juncture I vaccinated everyone I could find in the camp or immediate vicinity and continued

quarantine. As a result of this focus of infection I had six cases to develop, two white cases and four colored cases. On December 15 I discharged the situation and returned to my headquarters. I traced the origin of this infection to Abbeville, Georgia, directly.

From the above detailed report, you will note that during the year I have had 161 cases of smallpox to treat; only one death; that 84 of these cases were negroes and 77 were white. I have been sent to investigate two reported sanitary nuisances, one of which proved to be a real "sanitary nuisance." Summary.

During the year my entire time has been taken up in this style and it required a great deal of energy and self, as well as professional, sacrifice, to properly perform the duties of the office. I believe that if the State Board of Health of Florida could actually know what the assistants to the State Health Officer have to endure, that they would readily consent to adequately remunerate them on a basis of merit or for services rendered.

My experience in this office also suggests the necessity for State legislation in behalf of the State Board of Health for I find at all times that we have just enough authority to control contagious and infectious diseases in the State, but not enough to do so economically and with facility. State
legislation

Respectfully submitted,

R. F. GODARD, M.D.,

Assistant to State Health Officer.

DOCTOR E. W. DIGGETT,

ASSISTANT TO STATE HEALTH OFFICER.

Dr. Jos. Y. Porter, State Health Officer, Jacksonville, Fla.

DEAR SIR:

I have the honor to hand you herewith my annual report for the year ending December 31, 1905.

My work has been confined to preventing the spread of smallpox and yellow fever quarantine service, with

one exception, and investigation of typhoid fever at Green Cove Springs, Florida.

On December 11, 1904, on which date I entered the service as Special Agent of the State Board of Health, I was directed to join Dr. Godard, who, at that time, was taking charge of the smallpox situation in and around Marianna, Florida.

A full report will no doubt be given by Dr. Godard of that situation, but will add I received some very valuable information and was treated most courteously by Dr. Godard.

On December 29, 1904, I was directed to proceed to Newberry, Alachua county, and look into the smallpox situation at Camp's Phosphate mine. On investigation found no cases at this point, old cases having been discharged and quarters fumigated.

December 31, 1904. Was directed to proceed to Bell, Alachua county, Florida. Found twelve cases smallpox scattered through the colored settlement. The disease was of a mild type and had been mistaken by the white citizens to be chicken pox. No great difficulty was encountered at this point against vaccination, either among the white or colored. There were thirty cases in all and no deaths. Eight cases among the white, the balance colored. Did forty vaccinations and had ninety per cent. takes. The efficacy of vaccination was proven beyond doubt in this community. In one family, the postmaster's, the father developed smallpox. The wife refused to be vaccinated on the grounds that she was the only means of support for the family and should she develop a sore arm, they would be helpless. The baby was suffering at the time with *impetigo contagiosa*, so did not vaccinate either. Six other children, members of the same family, were vaccinated successfully and they were the only ones in the family to escape the disease.

On January 15, 1905, was informed by a citizen of Bell, who was employed at Williford, a neighboring town, that smallpox had broken out in a camp in the town. Investigated this matter and found it to be true, two

Smallpox
Alachua
County.

cases, both colored, were found in the quarters. Interviewed the proprietor of the camp and urged vaccination but met with considerable opposition and some abuse, both of myself and the State Board of Health. Advised isolation of cases and reported the matter to headquarters. Nothing further developed at this point as far as I know.

On January 16, was directed to Newberry to confer with Dr. Ruff concerning smallpox in one of the phosphate camps. Found upon investigation one case in family of foreman of the camp, the origin of the case being traced to a town in Georgia where the patient had recently attended school. Left this case in charge of Dr. Ruff and returned to Bell. Remained in charge of situation at Bell until February 5. Then I was directed to Ocala, Florida. My instructions were to confer with Dr. Newsome. On arrival, a wire awaited me directing me to go to Gainesville to confer with Dr. Hodges concerning smallpox at Cyril, Alachua county. Found on arrival at Cyril one case of smallpox in the scaling stage in a colored family, some two miles from postoffice. Dr. Hodges had seen the case and given all necessary instructions and had vaccinated some members of the camp of Brinkley & Baines.

On February 9, returned to Bell and resumed charge of situation at that point.

On February 12 was ordered to report at headquarters at Jacksonville immediately.

On February 14 was directed to Hedges, Nassau county, to investigate smallpox situation at Dunn's camp. Found on arrival seven cases of smallpox in the colored quarters. These cases were brought into Panama Park by rail, a box car being used, which was afterwards fumigated and carried to the Sand Hills by myself on February 17.

On February 20, returned to Cyril and resumed charge of smallpox situation at that point. Fourteen cases developed in this vicinity with one death, all being among colored population. The one death was that of an

Smallpox
Nassau
County.

old colored man who had a typical case of confluent smallpox with all the characteristic symptoms. This was by far the worst case under my charge during my service with the Board.

I had the disagreeable duty of officiating as undertaker and also that of sexton in this case, the rest of the colored population refusing to have one thing to do with the body. The disease was prevented from entering the quarters of Messrs. Brinkley & Baines by a wholesale vaccination and by a rigid quarantine being established against infected houses. A good deal of credit is due Messrs. Brinkley & Baines who, by their example, made it comparatively easy for me to vaccinate the entire population, white and colored. My treatment from these gentlemen was extremely courteous. One hundred and fifty vaccinations were done, with eighty per cent. of takes and no sore arms.

While I was in charge of the Cyril situation I was directed to take charge of two transient cases of smallpox that appeared in Gainesville and one at Micanopy, fortunately not having any spread of the disease in either place.

Smallpox
Bradford
County.

On March 6 was directed to proceed to Lake Butler, Bradford county, and confer with Dr. Tomlinson concerning smallpox in that neighborhood. Found two cases of smallpox of a mild type, one colored and one white. Discharged the old cases and left the situation in charge of Dr. Tomlinson and returned to Cyril.

Citrus County.

On March 16 was directed to proceed to Holder, Citrus county, to confer with Dr. McBride. Found one case of smallpox in a phosphate camp and isolated same. This field was left in charge of Dr. McBride.

Levy County.

On March 18 was directed to proceed to Montbrook, Levy county, and found upon investigation two cases of smallpox, both white, employees of a lumber concern, both convalescing. No other signs of the disease being present, returned to Gainesville and Cyril.

Polk County.

On March 21, was directed to proceed to Lakeland, Polk county, to confer with Dr. Henley concerning small-

pox situation in that neighborhood. Upon investigation, found four cases, which, according to instructions, were left in charge of Dr. Henley.

In answer to my request an interview was granted by the State Health Officer, Dr. Joseph Y. Porter, so I proceeded to Jacksonville.

On March 25 returned to Gainesville and Cyril resuming charge of the smallpox situation at these points.

On March 28 was directed to proceed to Citra, Marion county to investigate smallpox in that vicinity. No cases were found but rumors were heard of smallpox being present at Island Grove and Lochloosa, two towns in the immediate vicinity. According to instructions this field was left in charge of Dr. Carswell.

Marion
County.

From this time until the last of April was in charge of the smallpox situation in Alachua county.

My resignation was accepted, to take effect April 30, 1905.

On June 15, 1905, was recommissioned and directed to proceed to Miami, Dade county, and confer with Dr. J. M. Jackson, Jr. Went over the field with Dr. Jackson and found five cases of smallpox located in the grounds of the hospital. This hospital was finished and ready for occupancy but had not been formally accepted by the State Board of Health so could not be used.

Smallpox
Dade County.

The five cases were all colored and came from Henson's camp, situated on the F. E. C. Ry. extension. Several visits were made to this camp, quarters fumigated and the rest of the crew vaccinated. Three new cases developed in this community and were taken to the temporary hospital.

Several visits were made to the camp of the F. E. C. Ry. extension at Homestead but no signs of smallpox were found.

On July 28 was directed to proceed to Citrus, Marion county, and confer with the city clerk concerning a case of smallpox in that town. Upon investigation found the history of one case which was well and had been discharged, with no further development.

Typhoid fever
Clay County.

On July 31 was directed to Green Cove Springs, Clay county, to investigate the typhoid fever situation in that town. After conferring with local physicians, found the origin of the first case, a small town in Georgia.

During the balance of the year was occupied in train inspection service at Folkston, Georgia, and Camp Perry, Florida, during the yellow fever quarantine, a report of which is found elsewhere.

DOCTOR R. H. MCGINNIS.

SPECIAL ASSISTANT TO STATE HEALTH OFFICER.

In Charge of Detention Camp Durrance.

I beg to submit the following report from Jacksonville, Florida, relative to yellow fever in 1905:

Detention Camp Durrance (so named in honor of the late, lamented Executive Clerk of the State Board of Health, Richard L. Durrance,) was established August 3, 1905, five miles west of the city of Jacksonville, and equipped to accommodate twelve patients comfortably and twenty if necessary. This camp, prepared in three days, considering the rapidity of its construction, it was all that could be desired under the circumstances, at a cost of:

Construction	\$ 312.25
Furnishings, groceries and storage.....	374.13
Maintenance for four months.....	530.40
Rent for four months.....	100.00
Total expenditures for camp.....	\$1316.78
Sanitary inspector for county, for four months	200.00
Assistant to State Health Officer, salary for four months.....	600.00

Three men were employed at the camp, one in charge, one assistant and one cook. There were detained at the camp seventeen persons from infected districts; the aggregate of such detention was 165 days.

The office of the State Board of Health, at Jacksonville, was closed October 15, 1905, having been moved temporarily to Pensacola, Florida, and was re-opened November 23, 1905, on the return of the State Health Officer from Pensacola.

Your assistant endeavored to keep filed statistical reports to this office, and supply the demand for blanks, etc., for same; to answer and retransmit telegrams and letters of an important nature; to visit detention camp daily when innated by suspects; to vaccinate school children and others (about one hundred were vaccinated); to corral, with aid of sanitary inspector, small-pox subjects at Sandhills, disinfecting vacated premises; to visit sandhills as cases demanded; to confer with county authorities relative to sanitation, etc.; to render assistance to City Board of Health and confer with it on various matters relative to quarantine, etc.; and through the press, to quiet uneasiness, excitement, and allay panicky feeling.

TRAIN INSPECTION SERVICE.

Flomaton, Alabama.

DOCTOR HIRAM BYRD.

FIRST ASSISTANT TO STATE HEALTH OFFICER.

On the 21st of July 1905, it was officially announced that yellow fever existed in New Orleans. That announcement in an American city has always been followed by a mad rush. The impulse to get away on the instant is irresistible. Nor is it confined to the timorous few but many of the more conservative, who afterwards return, catch the spirit and join the maddening throng in that initial stampede. The fear of the disease and the fear of being quarantined seem to dethrone reason completely. And the closer in touch with the disease they are, the greater the fears and the more certain the flight. Heedless of whether they are already infected, they scatter to the four winds of the earth, not infrequently taking with

them disease to start an epidemic in cities, towns and villages far remote.

The health authorities of the several States in the yellow fever zone, taking cognizance of this initial flight, endeavor to keep the disease from invading their sacred precincts, hastily instituted surveillance of travel and traffic, each after its own method. The system of surveillance adopted by the State health authorities of Florida is unique. The maritime quarantine of Florida being operated by the Federal government, leaves little to be feared from the twelve hundred miles of coast. The great danger then is from interstate travel and traffic. And with the northern border of the State extending from Cumberland Sound to Perdido Bay, a distance of nearly five hundred miles, and intersected by no fewer than fourteen lines of railroad, interstate surveillance is a no less stupendous than important problem.

Flomaton, Alabama, being a State line village, the gateway to Florida from all the southwestern part of the United States, and the point nearest the infection, became the strategic point of the Florida inspection line. It was this inspection station that was entrusted to my care.

On the afternoon of July 24, I was directed by the State Health Officer to proceed to Flomaton and take charge of train inspection. I arrived at Pensacola on the night of the 25th and after a conference with Dr. Anderson the morning of the 26th, proceeded to Flomaton, getting there the afternoon of the same day.

SUPERVISION OF TRAVEL.

It is now recognized that a great majority of all cases of yellow fever is introduced by means of travel. After being bitten by an infected mosquito, the individual passes a certain time in good health before the disease develops. This is technically called the incubation period and varies from about two to five days. (The minimum known incubation period is 41 hours and the maximum 5 days and 17 hours.) If, during the period of incubation, an individual goes from an infected to a non-infected place, he will introduce the disease into the latter. An

Train
inspection
established at
Flomaton.

example of this was Victor Vitello, the Italian who landed in Tampa on the 22nd of July, and developed yellow fever after leaving New Orleans. It is for the sole purpose of preventing this that inspection of travel is instituted. And not all the people that leave an infected point, as New Orleans, are passing through the incubation period—indeed a very small per cent. is, but as we have no way of telling who is or is not, and as it takes only one such infected person to start an epidemic, and as so much depends upon the introduction of yellow fever into a State, we have to assume that every one from an infected place is infected until sufficient time elapses to show that he or she is not. Originally vessels from infected ports of departure were forbidden by law to enter non-infected ports of destination, until forty days had elapsed. Indeed that is where we get the word *quarantine*, from the Italian *quaranta* which means forty. But as we have grown more familiar with diseases and learned to know more accurately what the actual incubation period is, this excessive detention time has been removed. The United States Public Health and Marine-Hospital Service requires five days quarantine. The State health authorities of Alabama require seven days. In the recent epidemic, parties were required to be out of infected territory ten days before entering Florida.

HEALTH CERTIFICATES—IDENTIFICATION CARDS.

In epidemic times a great deal of confusion and annoyance to the traveling public, and even awkward and humiliating positions are brought about by lack of very simple precautions. It is the desire of all conscientious health authorities to give the greatest amount of protection with the least amount of inconvenience to travel and commerce. People were therefore permitted to enter Florida *upon satisfactory evidence that they had not been in infected territory during the previous ten days*. The Health authorities of Alabama accepted as satisfactory evidence the affidavit of the individual applying for admission into that State. This is based upon assumption

that all men are truthful. And while a great majority of the people would not perjure themselves in order to carry a point, yet some would. An example of this that came under my notice was an Italian from Meridian, Mississippi, bound for Pensacola. He presented himself at Flomaton on a Saturday afternoon with a certificate from the health officer at Mobile that he had been in that city two days. His ticket had been stamped in Meridian, Mississippi, the previous day. His evidence was not satisfactory and he was rejected. He returned to Mobile and on the following Thursday, just six days from the time his ticket showed he was in Meridian, he started to Pensacola again, this time fortified with a certificate from the health officer of Mobile that he had been there nine days. This comes of accepting individual testimony. The courts, recognizing this, do not ordinarily permit a man to testify in his own behalf. Excluding then individual testimony as being unsafe, the only way for one to prove that he has not been in an infected territory within the prescribed time, is to prove where he has been, during that time, in legal phrase—prove an alibi. This is usually done by a "health certificate" or identification card, which is the better term. The essential elements of an identification card are:

- a. Must be given by an officer of the law. This includes State and city health officers, mayors, justices of the peace, and so on, but must have an impression seal to show that he is bona fide officer.
- b. Must be based upon the officer's personal knowledge of the applicant's previous whereabouts and not upon applicant's own testimony.
- c. Must show that applicant has not been in infected territory within the prescribed time, and
- d. Must be signed in presence of the officer by the applicant as a means of identification.

While the above approaches the ideal certificate of previous whereabouts, only a very small per cent. of those presented, come up to this standard. Many were presented that otherwise were acceptable but that they were

signed by ".....: M.D." Such a certificate is invalid, because it is a simple matter to place "M.D." after any name. Other certificates stated that "....." says under oath that he has not been in infected territory" etc. This is based upon applicant's own testimony which we have seen is risky. Others are not signed by applicants at all. Such certificates could easily be exchanged or even bartered. Others merely state that applicant is in "good health," a fact which the quarantine officer could easily determine for himself as to take some other man's word for it. Some certificates told too little. The certificate issued by the New York Board of Health merely stated this: "This is to certify that there is no epidemic of contagious and infectious diseases in New York." Of course such a certificate would have to be supported by corroborative evidence, or rather the party would have to be passed upon the corroborative evidence instead of the certificate.

Not only were many of the certificates faulty but many presented themselves as candidates for admission into the State without a certificate of any kind. The usual plea was that they did not know that Florida was quarantined against the place they hailed from. Probably there are people who think to this day that the State was quarantined against the whole world because certificates of previous whereabouts were required of everybody entering the State. If, for example, one came from Birmingham, he seemed to think that the quarantine officer ought to know he came from Birmingham. We were compelled to reject such applicants or hold a court of inquiry. At such courts, all the evidence that could be brought forward as having either a direct or indirect bearing on applicant's previous whereabouts was admitted—expense accounts, order books, railroad tickets, hotel bills, occupation, acquaintance with travel and conditions in general, letters received, post marks, etc. When the evidence was sufficient to satisfy me that the applicant was a safe proposition, he was always admitted into the State.

Valid evidence as to one's previous whereabouts may be had in this way: He writes a description of himself, adds his signature as a means of identification and has the paper stamped every day by the ticket agent wherever he happens to be. After ten days, the stamp will give undoubted testimony of previous whereabouts. Indeed, I know of no better or simpler means of bringing such evidence than this.

RESTRICTIONS ON FREIGHT.

Formerly, when the contagium vivum of yellow fever was shrouded in such mystery, restrictions were placed upon every conceivable class of freight, even letters not excepted. But now it is well known that freight is a source of danger only as mosquito carriers. For that reason, empty cars and cars loaded in infected territory were fumigated before allowing them to enter the State. And later when yellow fever existed in Pensacola the same precautions were taken for the rest of the State against Pensacola. Not many cars from New Orleans and other infected places reached Flomaton without having been disinfected. But a close surveillance was kept on empty freight cars and whenever one came from infected territory, it was invariably fumigated unless it bore a card of fumigation from the U. S. P. H. & M. H. Service.

As before stated, train inspection at Flomaton was begun July 22 and lasted until November 12—a period of 114 days. The records of inspection kept, date from the 1st of August and are as follows:

MONTHLY REPORT FOR AUGUST.

Number passenger trains inspected.....	93
Number passengers inspected.....	2195
Number freight trains inspected.....	88
Number freight crews inspected.....	88
Number passengers admitted.....	2086
Number passengers detained awaiting evidence.....	78
Number passengers rejected.....	31
Number sick passengers or freight crews.....	0

Number passengers from Southern States.....	2125
Number passengers from Northern States.....	70

MONTHLY REPORT FOR SEPTEMBER

Number passenger trains inspected.....	35
Number passengers inspected.....	317
Number freight trains inspected.....	0
Number freight crews inspected.....	0
Number passengers admitted.....	306
Number passengers detained awaiting evidence.....	7
Number passengers rejected.....	4
Number sick passengers or freight crews.....	0
Number passengers from Southern States.....	258
Number passengers from Northern States.....	59

MONTHLY REPORT FOR OCTOBER.

Number passenger trains inspected.....	30
Number passengers inspected.....	305
Number freight trains inspected.....	0
Number freight crews inspected.....	0
Number passengers admitted.....	286
Number passengers detained awaiting evidence.....	18
Number passengers rejected.....	1
Number sick passengers or freight crews.....	0
Number passengers from Southern States.....	240
Number passengers from Northern States.....	51

MONTHLY REPORT FOR NOVEMBER.

Number passenger trains inspected.....	12
Number passengers inspected.....	35
Number freight trains inspected.....	0
Number freight crews inspected.....	0
Number passengers admitted.....	35
Number passengers detained awaiting evidence.....	0
Number passengers rejected.....	0
Number sick passengers or freight crews.....	0
Number passengers from Southern States.....	28
Number passengers from Northern States.....	7

COMPLETE REPORT FROM AUGUST 1ST TO NOVEMBER 12TH,
1905.

Number passenger trains inspected.....	170
Number passengers inspected.....	2852
Number freight trains inspected.....	88
Number freight crews inspected.....	88
Number passengers admitted.....	2713
Number passengers detained awaiting evidence.....	103
Number passengers rejected.....	36
Number sick passengers or freight crews.....	0
Number passengers from Southern States.....	2665
Number passengers from Northern States.....	187

On the 9th of August, yellow fever was reported in Pensacola. After that of course travel dropped off. Parties coming to points east of Pensacola were sent via Montgomery. About the 1st of September I was transferred to Pensacola, while the details of inspection at Flomaton were committed to the care of my two assistants, L. J. Anderson and John Morrissey, for whose excellent service the people of the State at large ought to be very grateful.

TRAIN INSPECTION SERVICE.

Jasper, Florida

DOCTOR R. F. GODARD,

SECOND ASSISTANT TO STATE HEALTH OFFICER.

Pursuant to instructions I herewith present to you a report on my service as assistant to the State Health Officer of Florida during the epidemic of yellow fever in Louisiana, Mississippi, Alabama and Florida in 1905.

On the 2nd day of August, 1905, I was directed to proceed to Jasper, Florida, for the purpose of establishing and maintaining a train inspection service against points known to be infected with yellow fever. My instructions as given by the State Health Officer, were to restrict travel from infected points and to fumigate all railway fruit

Train
inspection
service
established at
Jasper.

carriers which came from infected points and entered the State by the two railroads which pass through Jasper.

It was necessary to inspect each and every southbound train coming into this point and to require each passenger or member of train crew to give his or her name, the place which they were from and their destination together with an accurate account of their whereabouts for the ten days immediately preceding that particular date of admission. In order to execute these requirements, I was instructed to employ two competent assistants to aid in the work.

For the first few days it was very disagreeable and difficult to carry out these instructions because all passengers who were not qualified or who were not in possession of the proper credentials when arriving at Jasper, were compelled to return to Georgia or any place outside of the State of Florida or to prove acceptably by telegram, etc.

The credentials which I required were as follows: Each passenger or member of train crew was required to show that he or she had not been in a yellow fever infected community or city for the previous ten days, by certificate or other evidence which was convincing. We honored certificates issued by a State health officer, a city health officer, or his secretary, a notary public or justice of the peace, provided the official, issuing the certificate, stated of his own personal knowledge that the person to whom the certificate was being issued had not been in a yellow fever infected district for the ten previous days. These certificates were honored for days and even weeks after the date of issuance provided they were stamped at least every third day after the date of issuance by a postmark or a railroad agent and the bearer of the certificate could establish the fact by corroborative evidence that he or she was the person to whom the certificate was originally issued.

Nature of
credentials
required.

It was often necessary to require corroborative evidence as to one's whereabouts,—such as letters, postmarks, receipts, checks, order books and expense accounts.

Corroborative
evidence.

Frequently, it was a fact that we passed passengers on corroborative evidence rather than certificates for it was evident that I had often to deal with bogus certificates and with certificates which were issued by officials, bearing their signature and the seal of their office, to parties whom they had never seen and who had never been identified by any one who knew them to the official who issued the certificate.

August.

During the month of August, I found it necessary to put one of my assistants on each southbound passenger train, above the State line, in order that the passengers aboard might be inspected above the Georgia and Florida State line. In this way all passengers were notified before they reached the State line whether they were qualified or not to enter the State of Florida and if they were not, they were advised to leave the train at a telegraph station above the State line and instructed as to the best way to qualify by telegram, etc., at their own expense always.

The greater number of passengers readily took this advice and left the trains above the State line but there were a few who had to be ejected on the State line and even removed by officers at Jasper and invariably sent back into Georgia.

Freight
fumigation.

From the time quarantine was established—August 2—until it was raised—November 12—it was not necessary for me to fumigate for mosquitoes, a single car of fruit from a yellow fever infected point. There were a number of cars of fruit from infected points which were shipped on these lines during the time but they all bore the seal and certificate of the U. S. Marine-Hospital Service as to having been fumigated and loaded according to regulations of that service.

The State Board of Health of Florida is under obligations to the officials of the two railroads—the Georgia Southern & Florida and the Atlantic Coast Line—for their uniform courtesies and cooperation which were so freely accorded during the maintenance of the quarantine. Every request which I saw fit to make of these gentlemen in this work, was readily granted.

Experience acquired during this and other quarantines against contagious and infectious diseases which are so potentially grave as is yellow fever, suggests the importance of uniform laws and regulations in regard to quarantine. It is especially important that we have uniformity in our requirements as regards certificates of health, residence and whereabouts of persons who wish to travel while these epidemics are prevalent.

Number passenger trains inspected.....	237
Number passengers inspected.....	7274
Number passengers passed.....	6601
Number passengers rejected.....	140
Number passengers detained awaiting evidence.....	654

TRAIN INSPECTION SERVICE.

Folkston, Ga., and Camp Perry.

DR. E. W. DIGGETT, ASSISTANT TO STATE HEALTH OFFICER.

On August 2, 1905, I was ordered to proceed at once to Folkston Georgia, and establish quarantine on account of yellow fever in New Orleans. The first train inspected on August 3. According to instructions, a suitable assistant was engaged, a Mr. Mizell, who went on duty the morning of the 3rd of August. Considerable controversy was caused by a passenger being detained who could not furnish necessary evidence of his whereabouts for the past ten days, among the citizens of Folkston. The result of this controversy was my arrest. After communicating with headquarters the mayor decided to withdraw the charge if the quarantine station be removed across the line into Florida.

Yellow fever
quarantine
Folkston, Ga.

On August 4 was ordered to move the quarantine station to Camp Perry. The camp was opened on August 5 and all trains were stopped for inspection.

Quarantine
moved to
Camp, Perry.

It being impossible to obtain food in the camp or in the vicinity of the camp, for my assistant and myself, a cook was obtained from Jacksonville, mess tent erected and necessary utensils issued by Mr. Sceals, custodian of the camp of which a strict account was kept. The

emergency tents were erected and supplied with screened cots. A screened stretcher was made and quarters made ready for suspected cases.

Camp Perry was an ideal location for a detention camp but was a very awkward place to have trains stopped, it being situated on a curve with a rather steep grade. Owing to the danger entailed in having freight trains stopped arrangements were made with Mr. Wright, division superintendent, Atlantic Coast Line Railway, to notify us if any cars were from infected districts so as to stop trains at the camp for inspection. Also, all train crews were to be eastern crews.

New instructions and train report sheets were put into effect upon receipt of same. This new order increased the delay to trains so that Mr. Wright requested that conductors on trains be allowed to write up names of passengers, where from and destination, which was granted.

At this time a second assistant was asked for and allowed by the State Health Officer. A Mr. Wright was secured and placed on duty.

A great deal of annoyance was caused by passengers interfering with inspectors while inspecting trains and in several instances had to be warned against such action; for example, in going through a Pullman car, two ladies were politely told they would have to be detained until they could obtain evidence of their whereabouts for the previous ten days. A fellow passenger, a gentleman of some prominence in this State, interfered, claiming his word was sufficient and that he had seen them buy tickets for Jacksonville in the depot at Cleveland, Ohio. He was politely asked not to interfere but still persisted, freely criticising the State Board of Health and myself. Needless to say, these passengers were detained. Another instance, similar to the previous one, occurred with one of my assistants, Mr. Wright. While inspecting a train en route from Waycross, Georgia, to the camp, this gentleman saw fit to freely criticise and abuse my assistant and myself and might add, unjustly,

in the press. This matter was fully reported to the State Health Officer at his request.

Owing to the increased delay to trains caused by increased traffic, request was made by Mr. Wright, superintendent Atlantic Coast Line Railway, that inspectors be allowed to ride trains and inspect passengers en route from Jesup, Georgia, and Waycross, Georgia, to the camp. Arrangements were made and Mr. Wright was detailed to work from Waycross and Mr. Mizell from Jesup.

Considerable difficulty was experienced in passing upon the certificates obtained by passengers from city officials who had absolutely no knowledge of their whereabouts for the last ten days previous. These passengers were compelled to furnish additional evidence.

Some very remarkable statements were made upon these health certificates, for example the following, written upon a prescription blank:

"TO WHOM IT MAY CONCERN:

This is to certify that Mrs. Addie Roberson has not been exposed to yellow fever. She is therefore immune."

J. H....., M. D."

One lady passenger who was detained, upon her return North, while passing through the camp, dropped a note from the train which read as follows:

"Doctor—I had a very severe case of yellow fever the day I left your camp. For which you are the cause of infecting the whole State."

(Signed) "One of Your Victims."

This lady was the wife of a doctor and I had the pleasure of receiving a letter from the latter threatening to sue me and also the State Board of Health for unlawfully detaining his wife. These were some of the amusing incidents but on the whole the disagreeable ones were in the majority.

Two passengers were detained trying to get through the quarantine from New Orleans. They had received a certificate signed by an official of the Marine-Hospital Service allowing them to leave New Orleans after swear-

ing they would not go into any town or State quarantined against New Orleans. They had landed by steamer from Liverpool, England, and had been in New Orleans two days and two nights, coming to Florida by way of South Carolina. They were put in detention and carefully watched for ten days.

Bogus
telegrams.

Considerable difficulty and anxiety was caused by the telegraph operator, who was placed in charge of the telegraph station at Camp Perry by the railroad company, by delivering bogus messages in his endeavor to get detained passengers away from the camp. Upon an investigation being made he was found guilty and removed by Superintendent Wright.

One death occurred in the camp, that of a white tramp, who was brought to the camp by Deputy Sheriff Blake who found him in an exhausted condition on the roadside. Upon questioning the man, we found he had tramped from New York and was on his way to South Florida. A diagnosis was made of pernicious malaria which was verified by Dr. Holloway to whom specimens of blood were sent. The patient rapidly became comatose and in spite of rigorous treatment, died on the third day. An autopsy was done but nothing suspicious of yellow fever was found.

One other case of pernicious malaria was taken from the train, a colored boy. Dr. McGinnis saw this case and pronounced it malaria, his diagnosis being verified by Dr. Holloway to whom specimens of blood were sent. This patient died two days after his removal from camp.

Quarantine was lifted by order of the State Health Officer on the night of the 12th of November.

All camp property was turned over to Mr. Sceales the next day.

SUMMARY.

Number passenger trains inspected.....	647
Number passengers inspected.....	22582
Number passengers detained.....	308
Number of meals served in camp.....	1800

E. W. DIGGETT,

Late Assistant to State Health Officer.

TRAIN INSPECTION SERVICE.

Crestview, Florida.

DR. R. F. MAURA, SPECIAL ASSISTANT TO STATE HEALTH OFFICER.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

DEAR DOCTOR:

I herein render my report as special assistant to State Health Officer during the yellow fever epidemic at Pensacola, my service being from August 30 to November 20, 1905.

My duties were to inspect trains leaving and entering Pensacola over the P. & A. division of the L. & N. Ry. Only one passenger train a day left over that division from Pensacola, at 7 a. m., and returned at 10:45 p. m. I inspected the 7 o'clock train each morning going as far as Crestview, 51 miles from Pensacola, where the Yellow River Railway joins the P. & A. All passengers over this road were turned back into Alabama unless they could furnish satisfactory proof of not having been in an infected district within ten days just previous. The train leaving Pensacola at 7 a. m. carried only the train crew and myself and at Ynestra, another train which never entered Pensacola, awaited us. All baggage, mail and express, was transferred to this train. A new train crew from Escambia, the relay camp, took charge of the latter train, the former returning to Pensacola. No passengers were allowed to board the 7 a. m. train between Pensacola and Milton, 19 miles distant. This train returning to Pensacola was inspected by me from Crestview to Pensacola. No passengers were allowed to go beyond Milton, unless they had a permit to do so from the State Health Officer. On arrival at Ynestra, all baggage, mail, etc., was transferred to the relay train which came out from Pensacola each night on our arrival at Ynestra.

I know of only one person who succeeded in breaking through the quarantine, one Chas. Cox, a negro, who with the assistance of a negro brakeman, was smuggled out of

Pensacola in a coal car. I arrested him at Crestview, brought him to Pensacola where he was turned over to the authorities, tried and convicted.

TRAIN INSPECTION SERVICE.

Monticello, Florida.

DR. A. B. HARRISON, SPECIAL ASSISTANT TO STATE HEALTH OFFICER.

On August 6, a. m., I received a telegram from the State Health Officer requesting me to act as train inspector for travel over the Atlantic Coast Line Railway from Georgia via Thomasville into Florida. At 1 o'clock p. m., I boarded the train for Thomasville beginning my work. Conductors had not received instructions to pass me over the road, consequently for several days, I paid the regular passenger fare. The cost of travel was afterwards returned to me, however, through the Board.

It was not many days before I learned that the duties of inspector, properly carried out, were not altogether pleasant, for the reason some people will not be convinced that any duty or obligation of any one should interpose to bring restraint on them or their way.

While I had great sympathy for persons who were unable to prove to me that they were not from an infected district, I knew my greatest duty was to protect Florida and her citizens. This duty I performed to the best of my judgment, at the same time trying to be prudent in its exercise. My patience was tried many times and ways. Some persons would try to persuade me to pass them. Some offered to pay their way, while others contended they had the right to travel on tickets they had bought, and would not be prevented. It is true some were detained, others required to leave the train. I made it a rule at Thomasville to stand open to view so passengers could see and ask me regarding their passage, and before the train started, would call out to passengers, if going to Florida, they would be required to show their where-

abouts for the previous ten days. This prevented many being put off at Metcalf, near the State line.

I had no serious trouble, and presume I got along as well in restricting travel as it could have been done, considering the careless and indifferent way certificates were issued. Could say much regarding the giving of certificates but refrain, hoping for better, should there again be necessity.

When I began this work of inspection I believed I could do it without an assistant, but getting up at four o'clock a. m., and not being able to get any sleep until ten or eleven o'clock p. m., sometimes later, I found I could not keep it up on so little sleep and rest. On August 19 I employed an assistant at \$2.00 per day. He served seven days. Then on the 1st of September, I secured Mr. Theo. T. Turnbull to serve as assistant at \$2.00 per day, and he continued as my assistant until the 12th day of November, restrictions on travel being removed that date.

TRAIN INSPECTION SERVICE.

Yulee and Evergreen

DR. W. T. ELMORE, SPECIAL ASSISTANT TO STATE HEALTH OFFICER.

On the morning of August 3, 1905, when the State Health Officer issued instructions to the different special assistants to report at their respective stations to establish quarantine restrictions, on account of the prevalence of yellow fever at New Orleans and other points, I was instructed to proceed to Yulee and to establish a quarantine station at that point. The instructions specified that passengers must furnish conclusive evidence of their whereabouts for the preceding ten days before they would be allowed to enter the State.

With the aid of two assistants, W. W. Higginbotham and J. Starke Sims, both of whom rendered valuable service, we began the inspection on the afternoon of August 3, 1905.

It was deemed necessary at that time to inspect passengers at said point entering Florida via the Brunswick boat to Fernandina, until arrangements could be perfected at Fernandina; this, however, was promptly done, which left the Fernandina situation under the jurisdiction of Dr. J. L. Horsey of the Marine Service, and Dr. D. G. Humphrey, of the Board of Health.

On or about August 15, we were instructed to move the quarantine station from Yulee to Evergreen, Florida, a point on the Seaboard Air Line three miles from the St. Mary's River, and also the boundary line of Georgia. On August 20 we reached the above point. The camp was equipped with an adequate supply of marine tents, which were erected at once, and among the number, a suitable tent was selected for a hospital, which was isolated at a remote spot some distance from the camp, equipped with mosquito nets and the necessary adjuncts in case a suspect developed yellow fever. On one occasion a man who could not establish his previous whereabouts, was taken from a freight train, and becoming suddenly ill in a few hours, was kept under surveillance; and as the case proved to be yellow jaundice, the patient was discharged. We also treated one case of dengue fever.

From August 21 to November 12, 1905, inclusive, the quarantine station was maintained at Evergreen and on the last date mentioned, the quarantine restrictions were removed.

MODE OF INSPECTION.

It was found to be a more efficient procedure to inspect the trains en route before reaching the State line, and all passengers not meeting with the requirements were removed at the quarantine station, and afterwards rejected from the State.

The railroads cooperated with representatives of the Board, furnishing transportation to the inspectors.

When a passenger could not furnish a health certificate, according to the rules and requirements, he or she was allowed the alternative of establishing their whereabouts for the previous ten days, in the way of letters

showing the receiving post office stamp and date, railroad ticket stamps and other evidence. This evidence was found to be very satisfactory, as it furnished a complete train of evidence of original papers, and gave little time for any planning to evade the restrictions.

It was found very necessary to maintain a rigid quarantine, and in many cases, to examine papers in addition to the health certificate, as it was possible for a health certificate to be procured which had been issued to a different party than the person presenting the same.

It was possible that some irregularities could have been perpetrated, but by some detective work and the fact that the average passenger was a law abiding citizen and felt a keen interest in a rigid quarantine, reduced these matters to a minimum.

FORM OF HEALTH CERTIFICATE REQUIRED.

The requirements called for a certificate issued under the supervision of the State or city Boards of Health.

As a rule, certificates from local physicians were not accepted, as they were very often written on a blank piece of paper and failed to establish conclusive evidence.

We all believe that the enforcement of the strict quarantine was absolutely necessary under the then existing circumstances; and also that in future, in order to place an additional wedge in the restrictions, some standard form of a certificate should be required, issued by the different Boards of Health, and there should be a time limit fixed as to the expiration of said certificates after the date of issuance; and that no fee should be charged for the issuance of said certificate or the renewal of the same.

TRAIN INSPECTION SERVICE.

River Junction, Florida.

DR. B. F. BARNES, SPECIAL ASSISTANT TO STATE HEALTH OFFICER.

In regard to my work as train inspector, I beg to state that I did not have very much trouble. Only one man,

as far as I can remember, threatened to make the State pay him damages as he was on very important business. This same party afterward wrote Dr. Porter, State Health Officer, with reference to my detaining him.

G. F. & A. Ry.
Bainbridge to
Tallahassee.

On the Georgia, Florida & Alabama Railway, between Bainbridge, Georgia, and Tallahassee, Florida, my assistant had some trouble. He would reject negroes at the line and the railroad would send a team after them. He also had all kinds of threats made against him. Then the Greek, Stahi Morgomens, came along. He could speak very few words of English and the only way my assistant could find out his name was by a letter postmarked Columbus, Georgia. He absolutely refused to get off and was taken to Tallahassee and turned over to the sheriff. The sheriff let him go but we made affidavit against him and he was arrested in Apalachicola, Florida. I have heard that he plead guilty and was fined and that ended it.

The next trouble was the negro campmeeting. The highest number in one day was 111 and 24 rejected.

Inspection of
river steamers

On the rivers, the trouble was waiting for the steamers. Sometimes we would expect a steamer on one day and it would be from one to three days late. Sometimes they would be on a sand bar up the river and stay there a day or two. We had transportation on the steamers but they would charge 50 cents for each meal and fifty cents for lodging. We soon found that it was cheaper to travel on a ticket than a pass. After the river got so low, we quit going on the steamers and inspected them at the landing below the line. We had no trouble at all with the passengers on the steamers.

As I said before, all the trouble we had on the rivers was waiting for the steamers and fighting mosquitoes all night and sometimes all the rest we would get would be on a bale of cotton for our bed.

In August, commencing on the 10th, we inspected the following, up to November 12, when quarantine was lifted:

Number passenger trains and boats inspected.....	341
Number passengers inspected.....	4192
Number passengers rejected.....	147

TRAIN INSPECTION SERVICE.

Madison, Florida.

DR. L. C. RUTER, SPECIAL ASSISTANT TO STATE HEALTH OFFICER.

Yours of December 11 asking for a report of the work done by me as train inspector on the Valdosta Southern Railway received.

We commenced inspecting trains on the 19th of August and from the first met with nothing but kindness and cooperation from all the officials of the road. To make our inspection thorough, we had to go the entire distance from Madison to Valdosta, Georgia, twice a day. We would notice closely all the passengers that boarded the train at Valdosta and way stations and generally were pretty well posted by the time we arrived at Olympia, Georgia, the line between Georgia and Florida, where we made our inspection. We had little trouble after the first ten days, but up to that time there were many that knew nothing of the quarantine regulations and were not prepared with certificates. Occasionally, we would find a man that would think he could travel as well without identification papers as he could with them and when we would meet with one of these, we would promptly unload him at Olympia. We had considerable drunkenness to contend with, being between two towns that sold whiskey, and often met with rough crowds that we could not handle very well by ourselves. To help us out of this trouble, we had the sheriff to appoint a deputy at Pinetta, the first station in Florida and about two miles from the State line. We never had to call on him but it soon became known that he was there and it had a good effect on the rough crowds. We always approached every person courteously and usually met with the same respect but when we did tell a person they would have to get off, we always let the people see we meant what we said.

Madison to
Valdosta.

Deputy Sheriff
appointed at
Pinetta.

Dr. Cilett of
Atlanta.

For about six weeks, Dr. Cilett of Atlanta, was on our train looking after the welfare of Georgia and our work together was very pleasant. From the beginning to the end we guarded the interests of our State strictly and altogether our work was pleasant and satisfactory to ourselves.

PENSACOLA, FLORIDA.

DR. J. HARRIS PIERPONT, CITY HEALTH OFFICER.

Replying to your letter of the 7th inst, in which you request a statement of the sanitary conditions of the city of Pensacola, I beg to reply that never before during my residence of eighteen years has the city been in a more perfect sanitary condition. Of course, this is due largely to the recent energetic efforts of the City Board of Health expended in the crusade against the yellow fever bearing mosquito, whose extermination necessarily meant a thoroughly clean city, free from breeding places of the mosquito.

Now that yellow fever has been checked, the physicians are having very little to do, there being an exceptionally small number of even the usual diseases to treat.

I cannot speak officially for the county of Escambia but it is my opinion that conditions there are not unlike those described above, in the city of Pensacola.

DR. J. HARRISON HODGES, AGENT.

Alachua
County.

The only unusual incident in the health conditions of Alachua county during the year 1905 was the epidemic of dengue fever which prevailed to some extent throughout the county, but especially in Gainesville. Fortunately the first cases occurred late in the season and the epidemic did not gain much headway until the cool weather put a stop to it. I did not see any cases until about the middle of September. From this time until the 1st of October there were only a few cases scattered over town without any apparent exposure to each other. After the

1st of October, cases, many of them typical with the eruption, developed by the score until the cool weather checked and finally put a stop to it. Just how we got infected is not known. The disease seemed to spread from Tampa northward until it covered to a great extent the State. Prevailing as it did coincident with the yellow fever epidemic at Pensacola, it caused a great deal of uneasiness for a time, especially as the public seem to have a very strongly grounded belief that dengue is only a fore-runner of yellow fever. It does make an uncomfortable situation to be in the midst of a dengue epidemic in one part of the State with a yellow fever epidemic in another. Cases of yellow fever occurring in the midst of a dengue epidemic might easily go unrecognized for some time.

I urged the placing of a mosquito net over every case of dengue. This caused a mild panic in a few families with the statement that "the doctor thinks Johnnie's got the yellow fever." As yet many people associate mosquito protection only with yellow fever. When physicians everywhere get the habit of enforcing mosquito protection *against every case of fever from the first day*, then yellow fever epidemics will cease to be a blight and curse to our fair Southland. For to differentiate with certainty between every case of dengue, yellow fever and aestivo-autumnal malaria, puts us up against a thinking proposition. I do not hesitate to say that there are cases in which it cannot be done, clinically. My friend Andrade, of the State Board of Health, with his microscope, test tubes and reagents could doubtless clear up the doubt. But he is not always available and cannot be in two places at once. Therefore, spare not the mosquito net. Delays are dangerous.

DOCTOR J. FRANK CURTIS, AGENT.

No contagious diseases of note have existed in this county during the year 1905.

The general sanitary conditions are about such as

Baker County.

may be found in any new country where the sparsely settled condition of the territory in a great measure prevents the spread of disease by infection or contagion and the construction of the average country dwellings admits plenty of air and gives better ventilation than the up-to-date dwellings in more densely populated centers.

There have been some eight or ten cases of typhoid fever in different parts of the county during the year and these cases can be traced to no particular source of infection but seem to be of sporadic nature.

No cases of dengue have come under my observation although it has been reported that there were some two or three cases in the county at different points. One case in particular had no medical attention, recovered in a few days and from subsequent analysis of symptoms I am satisfied that there was no dengue fever but that the person thought so from the fact that said person had been visiting in Jacksonville when it was said to be so prevalent at that point. The other cases spoken of were either mild cases or some other disease.

Chicken pox seems to be very prevalent in Baker county and at the time of this report there are some ten or twelve cases in Macclenny under my observation. In many cases this has been very mild but in a few instances discrete smallpox might be suspected were it not for the characteristic chicken pox eruption. This is nearly altogether among the children although three or four adults have developed typical cases which, however, were not severe enough to confine them to their beds.

The water supply of our people in the past has been mostly from open wells but for the past two years the driven well is being used more generally and so by this method a fairly pure drinking water is secured. The health of the people seems to be far above that of those where the open well with its surface water is used.

There have been two deaths from tuberculosis during the past year. There are also some few cases in which I believe tuberculosis will develop later if conditions are favorable to the development of the germ.

DOCTOR JOHN C. WILLIS, AGENT.

We have had none of the diseases of any kind which require isolation, during the past year, except one case supposed smallpox near Lake Butler. Bradford County.

There have been several cases of malarial fever in different parts of the county. Several cases of typhoid fever in the western part of the county.

Aside from the above mentioned, the county has had its usual good health.

DOCTOR B. W. WILSON, AGENT.

As per your request, I beg leave to submit a brief report of the health and sanitary condition of Brevard county for 1905. Brevard County.

Owing to prevailing west winds during the summer and autumn and an unusual rainfall, we have had a good many cases of malarial fever, more than is usual in this county. Some of the cases have been quite severe and a few malignant. From similar conditions and the drinking of surface water, dysenteries and diarrheas have been prevalent.

No contagious diseases have been reported by any of the physicians of the county; in fact, the reports of vital statistics have been far short of what they should be and it is earnestly to be hoped that all physicians will, in future, co-operate with the State Board of Health in reporting all cases that may occur in their practice, necessary in enabling the Board to compile the true vital statistics of the county.

The sanitary condition of the county as a whole is fairly good and the different towns are interesting themselves in the best available sanitary measures at their disposal.

DOCTOR J. D. BENNETT, AGENT.

In answer to your inquiries about the health of Citrus county during the last year, am sorry to say it has not Citrus County.

been good. During the first half of the year it was fair but the rainy season commenced in May and rains were unusually heavy and frequent. Chills and fever and all the many complications of malarial diseases were unusually severe and very persistent. The low flat lands along the coast were partly submerged all the summer and mosquitoes swarmed all the time. The malarial fevers were not fatal; nearly all could be relieved in a few days. But they persistently returned. Every few days would bring a fresh attack.

Hemorrhagic fevers were frequent and malarial fevers with *haematuria* were frequent. There were some but very few deaths. All were treated without quinine. At least, no quinine was given after the *haematuria* appeared.

Typhoid fevers were very few, mostly mild; at least, nearly all recovered in our vicinity. This sickness was confined to no one part of the county but extended to the hills and was almost as severe as in the lowlands. Negroes were almost exempt from *haematuria*. I saw only one case, a negro boy.

Very few cases of *diarrhea* in children and very few of dysentery and these all mild.

A number of cases of malarial fever are present now. Some chills left over from last summer.

There were a few cases of smallpox in the early part of the year, in this county. All mild and all confined to negroes in the turpentine and phosphate camps.

There were a few cases of mild dengue fever.

This is about as near the health conditions as existing in Citrus as I can give in a short sketch.

DOCTOR T. M. EDWARDS, AGENT.

Clay County. There has been much sickness in Clay county during the year 1905, principally malaria and typhoid fevers. Typhoid fever prevailed during the summer and autumn months and was of severe type but not very fatal. The

origin of it was traced to other States with but few exceptions. Fortunately, the prevalence was not widespread.

An unusual amount of malaria fever occurred in the county during the year, some cases being of very malignant form. The severe types, as a rule, were with people who lived near swamps or very low lands. Very few cases occurred in houses which were screened.

An epidemic of dengue fever limited to the town of Green Cove Springs almost entirely, occurred during the latter part of the summer. The rash appeared in about seventy-five per cent. of the cases and the patient was left in a very debilitated state.

Dr. H. A. Johnson reported some cases of smallpox at Walkhill, a turpentine still four miles from Green Cove Springs. They were of a very mild type, so mild in fact as to almost make one think they were varicella. With the co-operation of W. C. Jackson, the proprietor of the still, the disease was soon stamped out without any expense to the State. These cases came from Bayard Florida.

No other contagious diseases occurred in the county except an epidemic of whooping cough in the early spring which was widespread, very few children escaping. However, there were no fatalities from it.

There are very few cases of tuberculosis in the county with the exception of tourists from the colder climates and some of the colored population living in the congested districts.

The sanitation of the town has been greatly improved by an ordinance passed by the city council of Green Cove Springs, compelling all the owners of vacant lots to remove and burn all rubbish and weeds from them. The enforcement of this ordinance will add greatly to the health of the community.

This county is rapidly building up. Our people are very grateful to Dr. Porter for his untiring efforts to stamp out all contagious diseases.

DOCTOR W. M. IVES, AGENT.

Columbia
County.

We had one of the healthiest years last year conceivable. As near no sickness as possible considering population but I do not know of any statistics to cover it. I know I kept no records of births and deaths in my practice and I do not think anyone else here did more than report one occasionally.

I could get the figures for Lake City but there are none for the county.

DOCTOR J. M. JACKSON, JR., AGENT.

Southern
Dade County.

I have the honor to report that during the past fiscal year the health conditions of South Dade county have been very good. During the winter season there were no contagious, quarantinable disease met with, in fact the health conditions were unusually good, but early in June dengue fever which had prevailed here in the late fall of the year before, again re-appeared and spread very slowly until the latter part of August when it again prevailed in epidemic form. The excitement usual to dengue when yellow fever is in epidemic form as it was then in New Orleans, prevailed among the more timid until they were assured it was only dengue. This dengue was closely watched by myself and the other physicians of the place and in over sixty per cent. of the cases rash was found and in no cases were there any alarming symptoms or other than those of typical dengue. Dengue continued epidemic until the latter part of November when it began to disappear and by the middle of December was all gone. It was noted that of the people who had it in 1904, many had it again in 1905 and in a large majority of the cases the rash both primary and secondary was found, thus demonstrating fully that the disease is not self protective by one attack as it is claimed by many. In my own private practice I found three people who had two well marked attacks within sixty days, the rash appearing in both seizures and in a great many an attack in 1905 fol-

lowing one of the year before and were so typical that the patients themselves recognized the disease and particularly the rash as soon as it appeared. I should say we had between 3,500 and 4,000 cases of dengue during the year 1905; and if we included the walking cases, I expect it would come nearer 6,000, because numbers of people had it twice.

During the early part of May, smallpox was found in one of the suburbs of the town, in a colored man, and the source of infection was traced to a grove south of Miami some fifteen miles. This place was visited and it was found that a laborer was employed there who had come from Jacksonville with a case of varioloid but had now recovered. The trouble had been so mild that he had not been confined to his bed or felt at all sick but had worked every day and said he had only a case of "bumps." There were some forty hands at work here and they had all been sleeping in one large house. Premises were disinfected and all were vaccinated but for some reason only one of these vaccinations was successful, so smallpox continued to occur at intervals until a fresh supply of virus was received and revaccination was done when all acquired good "takes" and premises were re-disinfected. These cases were all brought to the isolation hospital near Miami, by teams and cared for there. There were no deaths. The next to occur was that of a brakeman on the Florida East Coast Railroad which had been transporting workmen from New York for the extension to Key West. He came to my office in the vesicular stage and was sent immediately to the hospital and the cars he was known to have been in from time of his sickness, were disinfected. In none of these cases was there any spread from original source of infection. During the past year we had twenty-eight cases of smallpox which were cared for at the Dade County Isolation Hospital.

There has been no diphtheria or scarlet fever except one sporadic case of diphtheria some miles in the country which was diagnosed as diphtheria and the diagnosis confirmed by the laboratory of the Board, but this was

purely a sporadic case or at least the source of infection could not be traced and there were no other cases to occur.

The general health of Miami proper outside of the dengue above mentioned, has been excellent. During the year the water supply of the town has been extended until the system is on every street in the town and in general use. The water has been examined and is, chemically, first class with the exception of a small excess of carbonate of lime which is found in all soil waters in this part of the State. Our efficient State bacteriologist visited us and took sample of the water and made microscopical examination and found it pure from the standpoint of the laboratory and entirely free of any contamination. Those works are being enlarged until the supply is almost limitless and Miami now can boast of a pure and limitless amount of water. Outside the city limits and in the suburbs, well or pump water is still used which is liable to become contaminated and against which the public has been warned.

There have been some deaths from tuberculosis but in none of these could the source of infection be traced to Miami, its occurrence being among the visitors who came in search of health but too late. I have noted one thing: That the tubercular cases coming here do not do as well as in other localities but often decline very rapidly while the asthmatic and the purely bronchial or chronic bronchitis seems to do remarkable well in this climate.

The people are paying more attention to sanitary measures and the sanitary conditions of this section of the county are remarkably good for a new county, but are still subject to improvement. The general public as well as the city of Miami are to be congratulated on this point. The city has passed good sanitary regulations and has a good sanitary service. Attention is paid not only to the streets but to premises as well, and recently dumping grounds have been selected some two miles from the city where all garbage is dumped and burned daily.

I cannot close this without extending or expressing the feeling of confidence displayed and expressed by the people of this section in the ability of the efficient State Health Officer and his management of yellow fever both in Tampa and Pensacola. During these times which in the past would have been excitement and almost chaos of business, there was hardly a flurry; only expressions of sympathy for the stricken cities, and business was continued without interruption or excitement.

DOCTOR R. L. CLINE, AGENT.

The year 1905 was remarkable for its good health in this county. No epidemic of contagious or infectious diseases. Much less typhoid and malarial fevers. The educative work done through the papers was not all in vain. During and after the yellow fever scare many were taught the harm done by mosquitoes, flies and other insects.

DeSoto
County.

We had only two cases of smallpox during the year.

Only a very few cases of tuberculosis and most of them came from the upper States. Many of them make grand improvement and some cured.

The thing that engaged our attention mostly was *ankylostomasis*, for I am convinced that fifty per cent. of the children through the country are infected. I believe that many will be surprised to know how many adults are infected if they will only take the trouble to investigate. The profession should feel more concerned in the disease that dwarfs, ruins and kills more of South Florida's children than any other thing and all because of the need of one or two doses of *thymol*. I believe the State Board of Health could do more to the citizenship of Florida by sending agents over the State stimulating the doctors to treat *ankylostomasis* with *thymol*, than in any other way. I believe this condition is ignored by more than eighty per cent. of the doctors of South Florida. I hope the Health Officer will avail himself of this knowledge of the condition in this part of the State.

DOCTOR W. T. ELMORE, AGENT.

Duval County.

With the exception of prevalence of dengue in summer and fall of 1905, the health and sanitary condition of Duval county may be said to have been very good during the past year.

In reference to communicable diseases: I beg first to submit a tabulated statement of the cases of smallpox treated at the State Hospital for the year 1905:

Number of patients admitted, white.....	24
Number of patients admitted, colored.....	146
—	170
Number of patients discharged.....	161
Deaths	0
Number of patients remaining in the hospital January 1, 1906.....	9
—	170
Number of patients not vaccinated, who had smallpox	155
Number of patients vaccinated who had smallpox....	7
Number of patients vaccinated who had no smallpox..	8
—	170

Smallpox was more prevalent in 1905 than for the preceding year, but the increase can be attributed to the importation of laborers from Georgia for use in the various turpentine camps in Florida. Georgia does not enforce measures for the isolation of smallpox in the county districts. The disease usually being of a mild type, additional trouble is experienced in impressing the importance of vaccination to control the disease, the importance of which in its protective ability is being daily shown.

Tuberculosis.—Shows a larger percentage of deaths during the winter months, whereas there is a decrease in the summer months. The number of deaths from this disease of the two sexes in the colored population are

apparently on an equal basis, whereas among the white race the death rate among men is twenty per cent. greater, the colored race apparently being more prone to the disease.

Diphtheria.—Has existed in sporadic form during the year; a conservative estimate of thirty to forty cases would cover the total number of cases occurring in the county. The mortality has been low; antitoxin is generally used in most cases as soon as the diagnosis is made and with curative results.

Scarlet Fever.—The county has been practically exempt from this disease for the past few years, only one or two cases being reported by physicians for 1905.

Measles.—Has scarcely annoyed the county during the year.

Typhoid Fever.—Existed to a minor extent in the spring and early summer but lessened in the fall.

Dengue Fever.—Prevailed to some extent during the summer months and early fall. No official report was made but the prevalence was general.

Sanitation has been rigidly enforced in the smaller places, particularly Pablo Beach and Mayport on the coast. Jacksonville proper was placed in excellent condition by City Health Officer Miller, the cleaning of premises extending well beyond the city limits.

The management of Camp Durrance (detention camp) on the outskirts of the city of Jacksonville, was under the supervision of Dr. R. H. McGinnis, special assistant to the State Health Officer, who doubtless will furnish a report of the number of inmates and their disposition.

DOCTOR WARREN E. ANDERSON, AGENT.

The first half of the year 1905 was unmarked by any great disturbance to the usual health conditions prevailing in this county. Malaria fever and tuberculosis showed a considerable decrease over the previous year, while smallpox, varioloid, diphtheria, scarlet fever, measles and typhoid fever were greatly reduced.

Escambia
County.

Vital
statistics.

In the city of Pensacola, there were twenty-six deaths from pulmonary tuberculosis—twelve white and fourteen colored—as against thirty-six the year before.

The number of deaths from typhoid fever was twenty-one of which nine were among the white and twelve among colored.

Four cases of scarlet fever were reported, unmarked by any fatality.

Diphtheria appeared in nine cases, with a fatality of one.

No cases of measles were reported to this office during the year. There were forty cases of smallpox and varioloid (enumerated together) in the city and county, without a death. Of this number twenty-one were treated at the Isolation Hospital, at a cost in medicine, food, etc., of \$75.25, or about \$3.58 per patient, for an average period of about seventeen days each. Fifty dwellings were disinfected in various parts of the city and county and in no case was there any recurrence of disease after fumigation.

Fifty-three permits for the transportation of the remains of deceased persons to other States were issued from this office during the year 1905.

The total mortality for the city of Pensacola was 484, less still-births, thirty-three. This on an estimated population of 25,000 would make a rate of 18.04 per thousand.

Yellow fever
in Pensacola.

It must be remembered, however, that the city suffered an outbreak of yellow fever which increased the death rate somewhat over previous years. It would be impossible to complete this report without some reference to those incidents occurring in the later half of the year 1905 which seriously, but temporarily, affected the public health and prosperity of Pensacola.

An excursion, variously estimated at from three to five hundred persons, left here for New Orleans on July 15, returning about the 19th. Two days prior to the acknowledgment of the existence of yellow fever in New Orleans, or on the 20th of July, the agent for the State Board of Health for this county was apprised, confi-

dentially, by a medical friend then in the city, of the existence there of certain suspicious cases of fever. This information was guardedly transmitted to the State Health Officer by wire on that date. Upon the return to Pensacola from New Orleans of the medical friend aforesaid, or in about thirty-six hours after the receipt of the intelligence—the seal of confidence being removed—the agent of the State Board of Health immediately placed restrictions against the infected city and notified the State Health Officer of his action, being unable to reach him before. Instructions were soon afterward received from the State Health Officer defining the line of operation. Inspector Cusachs of the office here, was dispatched by the first train to Flomaton with instructions to prevent the entrance into this State of any person from New Orleans. On the 24th of July, finding it impossible to expedite the inspection service with one inspector, Mr. Louis Anderson was engaged to assist Inspector Cusachs in the work, and he reported for duty at once. Dr. Hiram Byrd, under instructions from the State Health Officer, arrived here on the 26th of July, and, after a conference with the agent of the State Board of Health, left for Flomaton to assume charge of operations already instituted there. Believing it possible for persons to escape from New Orleans, and, by a circuitous route enter West Florida via Floral, or probably River Junction, Mr. J. R. Keeling was engaged on July 29 as a train inspector at Crestview, Florida, from which point he could meet both trains to Pensacola. Dr. F. R. Maura, of this city, was afterwards placed in charge of this service, Mr. Keeling being stationed at Crestview under Dr. Maura's instructions.

Protection against the introduction of infection by small water craft was secured through the kindly offices of the United States customs inspectors, deputy harbor-masters, agents of mercantile houses and the personal watchfulness of the sanitary agent here. The issuing of so-called health certificates—more properly identification cards—was begun in order to expedite public travel

and retard as little as was consistent to the safety of the general health, all business operations.

The volume of travel was so increased by the 9th of August that Dr. Byrd applied for another assistant at Flomaton. In response thereto Mr. John Morrissey was engaged and reported for duty at once.

Referring momentarily to the personnel hitherto named in this report, as concerned in the quarantine operations of last summer, it affords me much pleasure to testify to their peculiar fitness for the duties they so ably discharged, and it can be safely said that had not the enemy already steadily entered the citadel through returning excursionists from New Orleans before a note of warning had been sounded, it would have been impossible for it to have gained entrance afterwards.

At noon of August 6th, a hurried call was made to the bedside of E. H. Hamm, upon request of the attending physician, Dr. Renshaw. It was found that Mr. Hamm had been ill for some three days, and was then in a most critical condition, being greatly disturbed by violent convulsive movements—hydrophobic in their character—which came on every two or three minutes and which terminated in death at 3 p. m. An autopsy was ordered and held immediately at an undertaker's establishment, Drs. Renshaw, Herron, Bickerstaff, Bryans, Blocker, Dewberry, Pierpont, Anderson and Miss Hoar (a trained nurse) being present. The cause of death was not determined but it was *unanimously* agreed that Hamm had *not* died with yellow fever. A full clinical and post-mortem report of this case was made at the time and is on record with the State Health Officer. Hamm is reliably reported to have had yellow fever here in 1882, and for some weeks prior to his death had not been from his work as engineer aboard the steam tug *Simpson* in this bay. Though there were numbers of non-immunes in the house and at the time of his death, none of them developed any infection afterwards, nor did those in residences nearby have any suspicious sickness whatever.

On August 24 at 9 a. m., a consultation was held with

Dr. Blocker over one of his patients—Mrs. Cressap, of 126 1-2 East Government Street. This lady, who had been taken sick on the 19th, as had also her husband, Mr. R. E. L. Cressap, was found in a dying condition and the case enveloped in such suspicious symptoms, that the State Health Officer was immediately informed. She died about 11 a. m., and, though an autopsy could not be obtained, the remains were removed and the premises subjected to thorough fumigation.

The State Health Officer was at once informed more fully by wire of these occurrences and his presence here suggested. This suggestion was adopted, and he left on the first train from Jacksonville. All data concerning these cases were carefully collected and submitted to the State Health Officer upon his arrival here on the following night, August 25.

State Health
Officer
arrives.

About noon of August 28 a gentleman reported a Greek sick of a serious illness, at 144 East Government Street,—a few doors east of Cressap's residence; and also three others at the northeast corner of Intendencia and Tarragona streets, one block away.

The agent of the State Board of Health investigated these cases at once and shortly afterward reported them to the State Health Officer as yellow fever. They were visited frequently by Drs. Porter and Anderson and every means in guarding against a possible error in diagnosis was exhausted. The opinion of yellow fever was confirmed the next day by the State Health Officer and a cordon ordered around that portion of the city bounded by Romana street on the north, Alcaniz on the east, Church street on the south and a line drawn from Church street along Jefferson street through Cushman's alley to Romana street on the west. Many persons within the infected district, learning of the preparations for placing the guards, escaped by night, and in fifteen to seventeen days the infection was found to have been established at a number of centers in various parts of the city. This cordon was removed after three weeks as its further continuance was rendered unnecessary by the force of events.

On August 29 a consultation was held with Dr. Bruce over the case of one, W. J. Abell, at 218 East Government street, his place of business being at 142 East Government street, adjoining that of the the first mentioned Greek and a few doors from the Cressap residence. This case was immediately pronounced one of typical yellow fever and was seen two days afterwards by Prof. Guiteras of the University of Havana, who concurred in the diagnosis. Upon the death of Abell, September 1, an autopsy was held by Prof. Guiteras in the presence of most of the physicians of this city and a report declaring the case one of yellow fever signed by all those present.

The State Health Officer, being in charge of the situation from this time until late in November, it will be unnecessary for me to enter into further details, as he has more thoroughly covered the entire field of operations in his annual report.

Certain observations, if briefly made, might be of some interest in this report, the first being that the disease appeared here in some *mild, unrecognized* cases, occurring amongst the returning excursionists from New Orleans about the 20th of July; that the *first* case, or original focus of infection was near the intersection of Government and Tarragona streets; that negroes, contrary to the generally accepted opinion, very frequently have the disease, and that so mildly as to make the *most* dangerous element of the population in its dissemination. They have been frequently found at work with a handkerchief tied around their heads, infecting more mosquitoes in a few hours than one could be certain of destroying in a week.

In my opinion yellow fever has been shorn of most of its terror under the scientific management instituted a few years since and so ably illustrated here by the State Health Officer. Prejudice against new methods of control and ignorance of the means and necessity of that control, are the chief enemies which we have to combat, but it is clearly apparent that these forces are beginning to yield at many points, and when completely shattered, outbreaks of yellow fever will not be more difficult to manage than

those of diphtheria, scarlet fever or varioloid, which no longer excite the fears of sensible people or jar upon the nerves of timid ones.

It is especially worthy of comment that during the prevalence of the disease here the past summer and fall, the health authorities were sustained in their efforts by the full, free and prompt support of the city and county officials in every possible means at their command, and the opposition from certain quarters, great at first, dwindled down to insignificant proportions at the close of the epidemic.

PENSACOLA, FLORIDA, JAN. 17, 1906.

(Copy.)

Dr. J. Harris Pierpont, City Health Officer, City.

DEAR SIR:

I would respectfully call your attention to the fact that the residence of A. Booske on Salamanca street, has not been fumigated since a case of yellow fever developed there, late in November 1905.

This house was overlooked at the time, but finding later—on December 19—it had not been promptly attended to, I instructed Inspector Cusachs of this office, to proceed at once with the proper measures. The execution of these orders was rendered impossible by the opposition of Mr. Booske, and I so reported to you verbally, at the time hoping that the City Ordinance covering such cases, could be made available. I desire to say that in my opinion, this building, the only one known to have escaped fumigation, should be treated as others have been, in order to destroy possibly infected mosquitoes and that there is yet time in which this work may be done with perfect safety to the public health.

It also occurs, to me, though the suggestion may be somewhat out of place, that the removal of all vessels or receptacles capable of holding water, and not in daily use, such as old barrels, kegs, boxes, glass or stone bottles, jars or broken crockery, etc., from the streets, yards and vacant lots of the city, should be done by the 1st of March next. There are many vacant lots, especially those

adjoining habitations, in which may be found hundreds of these receptacles; and, I am sure, you concur in the opinion that it is necessary to remove such possible sources of danger as early as practicable.

Very truly yours,

WARREN E. ANDERSON,
Agent State Board of Health.

AN ORDINANCE.

Entitled An Ordinance to Provide for the Extermination of Mosquitoes and the Destruction of Their Larvae:

Be it Ordained by the Mayor and Council of the City of Pensacola:

SECTION 1. It shall be the duty of all persons residing within the corporate limits of the City of Pensacola, to cover or screen before the 1st of March, 1906, and thereafter to keep covered or screened, all cisterns, tanks, reservoirs, or other open bodies of standing water upon their premises, with wire netting not larger than No. 18 mesh.

SEC. 2. Whenever it is not possible to screen or cover said cisterns, tanks, reservoirs, or other open bodies of standing water, it shall be the duty of the owners of the premises wherever there may be such receptacles above described, to oil with kerosene at least every fifteen (15) days during the period between March 1 and November 1 of each year, all such tanks, cisterns, reservoirs or other open bodies of standing water, using not less than one pint of kerosene to every fifteen square feet of surface.

SEC. 3. Whenever it may be impossible to either screen or oil such receptacles, as above provided, the owners thereof shall stock with minnows or small fish all cisterns, tanks, reservoirs or other open bodies of standing water upon their premises, and keep them so stocked from March 1 to November 1 of each year.

SEC. 4. It shall be the duty of all persons residing within the corporate limits of the City of Pensacola during the period between the 1st of March and 1st of November of each year, to empty at least every seven (7) days all kegs, barrels, boxes, jars or other vessels or receptacles of whatsoever kind upon their premises, which may contain water; and all such persons, or their agents, who may own any vacant lot within the corporate limits of the City of Pensacola shall cause to be removed therefrom before the 1st of March of each year, all barrels, kegs,

glass or crockery, tin or woodenware, boxes, jars or any other vessel or receptacle which may contain water.

SEC. 5. All other ordinances in conflict with this ordinance are hereby repealed.

AN ORDINANCE.

Entitled, An Ordinance to provide for the prompt report of Fever Cases, and to Protect the Public Against the Recurrence of Yellow Fever in this City:

Be it ordained by the Mayor and Council of the City of Pensacola:

SECTION 1. That it shall be the duty of all physicians practicing in the City of Pensacola during the period beginning March 1 and ending November 1 of each year, to report in writing to the City Health Officer, all cases of acute fever except those arising from known bodily injuries, which may come within knowledge or observation, within six (6) hours after the discovery of such case or cases.

SEC. 2. In any or all such cases reported to him, the City Health Officer shall be empowered and required, if in his judgment the occasion demands it, to investigate the case or cases so reported to him and if he has any doubt or suspicion concerning the nature of the illness, he shall report the fact to the agent of the State Board of Health immediately, and shall aid and assist him in such further investigation as may be necessary.

SEC. 3. Whenever any physician practicing his profession within the corporate limits of the City of Pensacola, shall be called to see or attend any case of acute fever, between March 1 and November 1 of each year, except those arising from known bodily injuries, it shall be his duty to order such case screened at once, and if such is not done, he shall so report to the City Health Officer, who may take such measures as may compel the proper screening of the patient for such time as may be required to render such case harmless to the public health.

SEC. 4. It shall be the duty of every parent or guardian of any child, and the head of every family, to properly screen any and all cases of acute fever occurring in such families between March 1 and November 1 of each year, and to keep such case or sick person properly screened for seventy-two (72) hours after the beginning of the attack of illness.

SEC. 5. This ordinance shall remain in force during the year 1906 and if occasion thereafter require, shall be enforced by proclamation of the mayor.

SEC. 6. All other ordinances in conflict with the terms of this ordinance are hereby repealed.

DOCTOR G. W. LAMAR, AGENT.

Gadsden
County.

Regarding the health of Gadsden county for the past twelve months, would say that we have been unusually fortunate. Little or nothing in the way of contagious diseases. This I think due in a large degree to the work of the State Board of Health along the line of "preventive measures." In other words, the people are becoming more and more educated in these matters.

The manner of conducting the fight against yellow fever at Pensacola has, I think, been a source of congratulation on the part of the people. Where the State Board of Health had so much to fight, to come out as she did before frost, was great.

DOCTOR C. W. BARTLETT, AGENT.

Hillsborough
County.

In making my annual report of the health of Hillsborough county for the year 1905, I can say that although cases of contagious diseases have been varied, a little of everything, we have had no great number of cases of any disease. The health of the county as a whole has not been any worse than in previous years.

During the year we had some smallpox, which was left over from 1904; typhoid fever, measles, German measles, scarlet fever, dengue, yellow fever, anthrax, malarial fever and diphtheria.

Smallpox.

Smallpox was left over at the beginning of the year, five cases being in the hospital, as will be seen by reference to the tabulated report appended hereto. During the early part of the year smallpox was entirely among the negro race and prevailed rather extensively not only in Tampa, but also in other parts of the county, as Turkey Creek, Plant City, St. Petersburg and Port Tampa. There were

also a few cases among the whites, and here we came to our first complication, as one of the white cases was a young lady in the city of Tampa and the hospital was full of negroes. Of course, it was practically impossible to have her in the hospital and she was quarantined outside. Since then the new hospital for whites has been built, and it is to be hoped we shall not have any such annoyances in the future. A knowledge of smallpox conditions will be better obtained by a study of the appended tables, which shows that in the month of January the total number of cases admitted to the hospital was eight and four discharged during the month, leaving nine remaining. The number of rations issued was 717. In February there were admitted 29, discharged 11, number of rations 1095. There was one death at Live Oak during this month. In March, 48 were admitted and 44 discharged, number of rations 3,096. There were two deaths during this month. During April, 17 were admitted and 26 discharged, number of rations 1,716. In May, 24 were admitted and 3 discharged, number of rations 2,325. There were no deaths. In June, 7 were admitted and 3 discharged; number of rations 3,645, no deaths. During July none were admitted and 35 were discharged, rations furnished 1,797. This left only 8 in the hospital at the beginning of August and these were discharged when the hospital was closed on August 8.

During the whole year the cases have been late in being reported and some have not been reported at all, which has been a cause of trouble, as many cases have never reached the knowledge of the State Board of Health. Sometimes it seems that mistakes were made in diagnosis by physicians. I have known cases to go under the name of dengue that should have been diagnosed differently. Besides the deaths named, the loss of sight in two individuals is to be regretted and also of one eye in another.

The agent of the State Board of Health was compelled to bring before the court a physician of the city of Tampa, for not reporting a case, and although not convicted, he being discharged under the statute, it showed to the peo-

ple and physicians the conditions existing and reports then came in frequently and regularly. Some did not want to be confined to the hospital and one man left without authority and came to the city of Tampa. He was arrested, convicted and sentenced to five months. It has not been the policy of the health officers to punish unnecessarily; we have appealed to the law only when compelled to do so.

Vaccination.

During the smallpox cases among the negroes, Dr. Grantham, city health officer of Tampa, decided to have a general vaccination among the colored people. The result was very successful and very soon put an end to the disease. Since then we have not had a single case reported among the colored population of this city which is one more victory for vaccination.

The citizens of Tampa have availed themselves as a rule of the opportunity of vaccination during the past few months, but a large number still remain to be vaccinated. It is worthy of remark that not a single case of smallpox has been noted among those who had or have lately been vaccinated. I have seen a house in which there were six persons living and five of them had the smallpox, while the only one who escaped was the sole person who had been vaccinated. So it has been my privilege to see instances where members of a family who had been vaccinated, have gone to the smallpox hospital and taken care of other members of the family sick with smallpox and in not a single instance did those who had been protected by vaccination, take the disease. Among the whites I have seen five such cases this year.

After closing the hospital on August 8 nothing more was heard of smallpox until October 31, when one of the physicians reported that he had seen a case on West 10th avenue. I investigated and found two confluent cases in the family of a Mr. Archer. Their very ill condition was probably the cause of their calling a physician. Upon investigation I found that during the whole summer mild cases of smallpox had prevailed in the town. Some had had physicians to see them. The disease had gone under

the name of dengue. These cases in West 10th avenue and all the cases since then have been among white people. As shown in the tables, from the 31st of October to the last of November, the cases admitted to the hospital numbered 14, discharged 4, number of rations furnished 981; in December, admitted 38, discharged 35, number of rations 1,770. (To the rations furnished should be added the meals furnished nurses—from one to three per day—during the time the hospital was open.) We had at the time several cases that were not at the hospital because of living at a distance, and in St. Petersburg. These amounted to seven. There were also three in the suburbs of Tampa and one at Turkey Creek. During this time there were two deaths among those treated outside the hospital, while we had no deaths among those treated at the hospital. The total number of white cases during the year was 63.

Typhoid fever has prevailed in Tampa throughout the year but was worse during the months of March, April, May, June and July. It prevailed very extensively in the northern part of Tampa and in Ybor City and some thought it was due to those places having been used as camps by the U. S. Army. The people had no water supply except wells and the city water was examined by the State authorities and found not to be contaminated. In the city itself we had some cases but not so extensively as in the other sections mentioned. The total number of deaths from typhoid during the year was four.

Typhoid fever.

Rubella made its appearance but did not prevail very extensively.

There was an epidemic of measles among the children at the same time.

Scarlet fever was less than in the previous year. There were but very few cases.

Diphtheria, like typhoid, prevailed throughout the year, but not very generally. Not all the cases were reported but judging from my private practice, I believe they were less in number than during the previous year.

FLORIDA STATE LIBRARY

Yellow fever.

On June 18 a rumor reached me of a case of yellow fever on a schooner that had arrived at Port Tampa. I visited the place and found two sailors on a schooner that had come from Vera Cruz. One of them, an American, had died of uremia and was buried before I had been informed. The other, a native of Grand Cayman, was admitted to the Marine Hospital at Port Tampa. These cases were thoroughly investigated by me and afterwards by the State Health Officer and myself, and we came to the conclusion that they were not cases of yellow fever. During this time I had an opportunity of conferring with the State Health Officer and arrangement was made as to procedure in case yellow fever should make its appearance in the county.

The location
of Victor
Vitello.

On July 1 I received a telephone message late at night that a man had died at Plant City of black vomit. In early morning, a post mortem examination being held, disclosed the fact that he had died of acute yellow atrophy of the liver.

A full account of the finding of yellow fever, one case, at West Tampa, as requested by the State Health Officer, is as follows: On July 25 I was called by telephone to the office of Hendry & Knight by Mr. Knight, and there I found the chief of police, who stated that one of the sanitary inspectors had heard a negro say that he had heard two Cuban women speak of an Italian who had shortly arrived from New Orleans and was very sick and thought to have yellow fever. The sanitary inspector was introduced to me and he took me over to where the negro was, but the negro denied any knowledge of the matter. His employer seemed to be rather angry and told him that was what he got for talking too much and that he was losing time on a busy day. This made the negro deny still more positively that he had heard anything, but upon being told by the inspector what he had said to him, the negro said he could not find these women again; that he had not noticed their faces, had merely heard them talking on the street. I tried to persuade him to tell me the truth and he made the same statement of denial. Seeing

that nothing could be obtained from him by argument, I placed him under arrest for making false rumors of infectious diseases and took him into my buggy and headed for West Tampa. He remained silent until I had crossed the bridge when he asked what I was going to do with him. I told him we were going over all the city of West Tampa and would see each and every woman until he identified the woman who had made the remark, and if necessary I would put a deputy sheriff with him and it might take weeks. He then told me where the woman was to be found, after I had told him that I would let him go at once if he did so. He took me directly to the house and there I found an American woman who had married a Cuban man. At first she denied all knowledge of the matter, saying that she had not talked to any one that day about yellow fever. I remained some time at the store where she was and after a while I asked her if she had ever had yellow fever, to which she replied that she had. Then I said she ought to be ashamed, she being immune, to permit a risk which she could prevent to many others who were not immune, whereupon she broke down and said she thought that the man was at a certain house back of the Rico factory. I went over there and found that the case she referred to was a chronic case of abscess of the liver which had been under my personal care. I returned to her again and was then sent to another house, where I found a case of ulcer of the leg. Returning a third time, I begged of her to tell me who the other person was she had talked with, as it seemed she was now willing to direct me to the suspected man but was not able to do so. She said it was an Italian woman who had a store close by, which she pointed out. I went there and found the same conditions as in the cases of the negro and the first woman. This lady was of Italian descent, born in the city of New Orleans. She denied all knowledge of any conversation about yellow fever or of any person afflicted with that disease having come to the city. I thought I was at the end of my rope, but I decided I would not give it up, so I remained in her house for some time. Fortunately, it

happened that she had three little children and after greatly admiring them and telling the mother what dear little things they were, I went into a discussion of how horrible was yellow fever among children and ended by saying it was a pity that those beautiful little children would probably be cold in death within a few weeks, should yellow fever get into the town. About that time the American-Cuban lady came in, and, although she acted as if she had never seen me before, she helped me greatly by describing the death of her father and mother from this terrible scourge. By that time the Italian mother was so scared and looked so pale that it was almost pitiful to see her and I began to feel as if I would accomplish my purpose and I continued the conversation by telling how easy it was to prevent the spread of yellow fever if it was found in time and then I acted as if I was going away. But the status of affairs had changed. She begged me to wait and see her husband who she thought knew of the man who came from New Orleans. The conversation with the American-Cuban lady continued and the other finally became so frightened that she did not want me to even wait for her husband. She then called in a neighbor, an Italian woman, and they locked themselves in a room and talked for a half hour, pleading and arguing. At last they came out and told me they would give me the name of the sick man, although it was probable that I could obtain the address from the first Italian woman. I decided that with the name I could gain time; so I went to another Italian, a barber, and said to him that I had the name of a man, which had been telephoned to me from Ybor City, and he got his book and gave me the address at once. I drove at once to the house and there found Victor Vitello. At first I was denied admission to the house, but finally succeeded in obtaining an entrance. It was not long before I was positive that he had a case of yellow fever; but it took me quite a long while to obtain his history as Vitello was not at all anxious to talk with me, until I threatened to have him arrested. He then said that he had been in a house in New Orleans where there

were four cases. One had died. When he left, there were three cases in the house. He would never give me the number of this house in New Orleans where he had lived.

On leaving the house of Vitello, I went to my office and examined his urine in which I found considerable albumen. I telegraphed to the State Health Officer at once, as per our agreement, and then went over to West Tampa again with two men whom I had previously selected and trained for this kind of work; and within two hours from the time I had found Vitello, he was under a mosquito net and his small house with the two houses next to him were thoroughly screened. A cordon was thrown around the premises to prevent the escape of those who were not immune, and then that same night I proceeded with the fumigation of all of the first six houses nearest him. I telegraphed to Dr. Porter at Key West to see if he would take that night's steamer, but he had left Key West by way of Miami. Upon his arrival at Jacksonville I received a telegram from him asking for full information, which I sent him at once. He ordered me to proceed with the fumigation, and stated that he would be in Tampa early the next morning, which he did. He confirmed my diagnosis and extended the cordon to three hundred feet in all directions from the infected man. The precautions taken to prevent the spread of yellow fever were fumigation of all the houses within the cordon twice a day with pyrethrum powder and once during the quarantine with sulphur; of course all the houses were screened and all persons who were not immune were kept under observation and visited and their temperature taken twice daily. As this was the first case treated in the United States under the mosquito law, I want to say that not a single pillow, mattress or similar article was destroyed and although persons who were not immune stayed in the same room and used the same mattress that had been used by Vitello, yet no one took the infection. Every house and every person in the quarantined district had been furnished with mosquito bars.

State Health
Officer
arrives.

Dengue.

To make matters worse, dengue with pronounced diagnostic rash, had made its appearance some week or two previous and after the appearance of the case of yellow fever all physicians made careful examination of urine. A number were found with albumen which caused a great deal of work for the State Health Officer and myself. I believe the reason why albumen was found in those cases was because of the examination of all cases of fever which I do not think were more than a physician would discover in his office practice in the examination of applicants for life insurance. The assistance which we received during this time from the physicians and citizens generally in Tampa was all that could be asked for and it was due to this help probably that the yellow fever was confined to the one case.

On the announcement of the case of yellow fever at West Tampa, the citizens were calm and composed, showing a desire to help the State Board of Health throughout the summer. We had during the same time the two cases of Mr. McCord and a Cuban, which proved not to be yellow fever, and a full report of which has previously made to the State Board. The epidemic of dengue which appeared with the yellow fever was probably one of the most extensive ever in Tampa, very few of the citizens escaping, although there were no deaths, except in the case of one woman who was ninety-six years of age, a Cuban.

One case of anthrax was reported, but we were unable to find the origin of infection. The patient, a woman, died.

HOSPITAL TABLES—HILLSBOROUGH COUNTY.

	In Hospital.	Admitted.	Discharged.	Total.
January 1.....	5.....	0.....	0.....	5
" 9.....	5.....	1.....	0.....	6
" 10.....	6.....	0.....	0.....	6
" 13.....	6.....	1.....	0.....	7
" 14.....	7.....	0.....	0.....	7
" 16.....	7.....	1.....	0.....	8
" 17.....	8.....	0.....	0.....	8
" 19.....	8.....	2.....	0.....	10
" 20.....	10.....	1.....	0.....	11
" 21.....	11.....	0.....	0.....	11
" 22.....	11.....	0.....	2.....	9

OF THE STATE BOARD OF HEALTH.

	In Hospital.	Admitted.	Discharged.	Total.
January 23.....	9.....	0.....	0.....	9
" 25.....	9.....	1.....	0.....	10
" 26.....	10.....	0.....	0.....	10
" 27.....	10.....	1.....	0.....	11
" 28.....	11.....	0.....	0.....	11
" 30.....	11.....	0.....	2.....	9
" 31.....	9.....	0.....	0.....	9
Left over				5
Admitted				8
Discharged				4
Left in Hospital.....				9
Deaths, NONE.				

The number of rations issued can be obtained by multiplying the total in Hospital for each month by 3.

	In Hospital.	Admitted.	Discharged.	Total.
February 1.....	9.....	0.....	0.....	9
" 4.....	9.....	1.....	4.....	6
" 5.....	6.....	0.....	0.....	6
" 6.....	6.....	2.....	0.....	8
" 7.....	8.....	0.....	0.....	8
" 8.....	8.....	1.....	0.....	9
" 9.....	9.....	0.....	0.....	9
" 14.....	9.....	1.....	0.....	10
" 15.....	10.....	0.....	0.....	10
" 16.....	10.....	1.....	0.....	11
" 17.....	11.....	5.....	0.....	16
" 18.....	16.....	0.....	0.....	16
" 21.....	16.....	1.....	3.....	14
" 22.....	14.....	0.....	0.....	14
" 24.....	14.....	3.....	4.....	13
" 25.....	13.....	7.....	0.....	20
" 26.....	20.....	0.....	0.....	20
" 27.....	20.....	2.....	0.....	22
" 28.....	22.....	5.....	0.....	27
" 29.....	27.....	0.....	0.....	27
Left over				9
Admitted				29
Discharged				11
(One case at Plant City).				
Deaths, NONE.				

	In Hospital.	Admitted.	Discharged.	Total.
March 1.....	27.....	0.....	0.....	27
" 4.....	27.....	6.....	0.....	33
" 5.....	33.....	2.....	1.....	34
" 6.....	34.....	3.....	0.....	37
" 7.....	37.....	0.....	0.....	37
" 9.....	37.....	0.....	14.....	23
" 10.....	23.....	2.....	0.....	25
" 11.....	25.....	3.....	0.....	28
" 12.....	28.....	3.....	0.....	31
" 13.....	31.....	3.....	0.....	34
" 14.....	34.....	4.....	0.....	38
" 15.....	38.....	4.....	1.....	41
" 16.....	41.....	1.....	3.....	39
" 17.....	39.....	3.....	0.....	42
" 18.....	42.....	1.....	0.....	43
" 19.....	43.....	1.....	0.....	44

		In Hospital.	Admitted.	Discharged.	Total.
March	20	44	2	0	46
"	21	46	0	11	57
"	22	35	1	0	36
"	23	36	0	0	36
"	24	36	2	0	38
"	25	38	1	14	53
"	26	25	0	0	25
"	29	25	3	0	28
"	30	28	0	0	28
"	31	28	0	0	28
Left over					27
Admitted					48
Discharged					44
Deaths					2

		In Hospital.	Admitted.	Discharged.	Total.
April	1	28	3	14	45
"	2	17	0	0	17
"	3	17	1	0	18
"	4	18	2	0	20
"	5	20	3	0	23
"	6	23	0	0	23
"	8	23	0	6	29
"	9	17	1	0	18
"	10	18	1	0	19
"	11	19	0	0	19
"	13	19	1	0	20
"	14	20	1	0	21
"	15	21	1	0	22
"	16	22	1	0	23
"	17	23	0	7	30
"	18	16	0	0	16
"	19	16	2	0	18
"	20	18	0	0	18
"	21	18	1	0	19
"	22	19	0	0	19
"	27	19	1	0	20
"	28	20	0	0	20
"	29	20	0	4	24
"	30	16	0	0	16
Left over					28
Admitted					17
Discharged					26
Deaths, NONE.					

		In Hospital.	Admitted.	Discharged.	Total.
May	1	16	0	0	16
"	3	16	3	0	19
"	4	19	0	0	19
"	7	19	2	0	21
"	8	21	2	0	23
"	9	23	0	0	23
"	10	23	2	0	25
"	11	25	0	0	25
"	18	25	1	0	26
"	19	26	1	2	29
"	20	25	0	0	25
"	21	25	1	0	26
"	22	25	0	1	26

		In Hospital.	Admitted.	Discharged.	Total.
May	23	27	0	0	27
"	26	27	2	0	29
"	27	29	0	0	29
"	29	29	3	0	32
"	30	32	0	0	32
"	31	32	7	0	39
Left over					16
Admitted					24
Discharged					3
Deaths, NONE.					

		In Hospital.	Admitted.	Discharged.	Total.
June	1	39	0	0	39
"	5	39	1	1	41
"	6	39	0	0	39
"	7	39	1	0	40
"	8	40	0	0	40
"	12	40	0	1	41
"	13	39	2	0	41
"	14	41	0	1	42
"	15	40	0	0	40
"	17	40	1	0	41
"	18	41	0	0	41
"	23	41	2	0	43
"	24	43	0	0	43
"	30	43	0	0	43
Left over					39
Admitted					7
Discharged					3
Deaths, NONE.					

		In Hospital.	Admitted.	Discharged.	Total.
July	1	43	0	0	43
"	2	43	0	4	47
"	3	39	0	0	39
"	4	39	0	3	42
"	5	36	0	0	36
"	6	36	0	7	43
"	7	29	0	0	29
"	10	29	0	10	39
"	11	19	0	0	19
"	18	19	0	5	24
"	19	14	0	0	14
"	23	14	0	6	20
"	24	8	0	0	8
"	31	8	0	0	8
Aug. 1 to 8		8	0	0	8
Left over					43
Admitted					0
Discharged					36
Deaths, NONE.					

		In Hospital.	Admitted.	Discharged.	Total.
October	31	0	6	0	6
Nov.	1	6	0	0	6
"	7	6	4	0	10
"	8	10	0	0	10
"	9	10	4	0	14
"	10	14	0	0	14

		In Hospital.	Admitted.	Discharged.	Total.
Nov.	18.....	14.....	0.....	4.....	10
"	19.....	10.....	0.....	0.....	10
"	30.....	10.....	0.....	0.....	10
Admitted to Hospital.....					14
Discharged.....					4
Deaths, NONE.					

		In Hospital.	Admitted.	Discharged.	Total.
December	1.....	10.....	0.....	0.....	10
"	4.....	10.....	4.....	0.....	14
"	5.....	14.....	0.....	0.....	14
"	7.....	14.....	2.....	0.....	16
"	8.....	16.....	4.....	1.....	19
"	9.....	19.....	2.....	0.....	21
"	10.....	21.....	2.....	0.....	23
"	11.....	23.....	0.....	0.....	23
"	12.....	23.....	0.....	6.....	17
"	13.....	17.....	1.....	0.....	18
"	14.....	18.....	1.....	0.....	19
"	15.....	19.....	0.....	0.....	19
"	16.....	19.....	2.....	0.....	21
"	17.....	21.....	1.....	0.....	22
"	18.....	22.....	0.....	0.....	22
"	19.....	22.....	2.....	0.....	24
"	20.....	24.....	2.....	0.....	26
"	21.....	26.....	1.....	8.....	19
"	22.....	19.....	0.....	2.....	17
"	23.....	17.....	8.....	0.....	25
"	24.....	25.....	1.....	0.....	26
"	25.....	26.....	1.....	0.....	27
"	26.....	27.....	0.....	0.....	27
"	27.....	27.....	3.....	6.....	24
"	28.....	24.....	0.....	0.....	24
"	29.....	24.....	3.....	0.....	27
"	30.....	27.....	1.....	0.....	28
"	31.....	28.....	0.....	0.....	28
Left over.....					10
Admitted.....					28
Deaths, NONE.					

DOCTOR W. J. LEE, AGENT.

Below please find health report of Holmes county for 1905.

The most of our sickness has been of malarial origin. Some typhoid in different portions of the county. Less serious sickness than in the last five years.

We have had some smallpox, three cases, which occurred in the county jail. Were controlled without further spread. The infection came through a prisoner from Hynote, Alabama. There had been a few other cases but occurred among turpentine and railroad hands, in

Holmes
County.

every instance negroes. Spread was controlled and infection came from Alabama.

DOCTOR A. B. HARRISON, AGENT.

The sanitary condition in Jefferson county during 1905 was perhaps better than it was in some years previous, especially the town of Monticello, with natural drainage excellent, streets kept free of garbage and trash, and sewer better cared for than formerly.

Jefferson
County.

There was but little sickness in the county of diseases usual to this portion of the State; few cases of typhoid fever, without fatality; not a case of pneumonia of which I heard, during the year. We had cases of fever, mild type, few cases of continued fever. Death rate unusually low considering population.

The epidemic of lagrippe that was so prevalent in the State, gave to Monticello about thirty cases in the months of September and October.

At the beginning of the year, we were having a continuation from the year before, of an epidemic of smallpox that had spread over considerable territory in spite of efforts made to stop it. On January 6, it was reported that a negro man in town had smallpox. Upon visiting his house learned he had been broken out four days and that several other negroes had been exposed visiting his house. He was put under quarantine restrictions and all persons forbidden entrance to the house without permission until he was discharged and the house disinfected. Realizing the danger of an epidemic in town, I canvassed the town from house to house, vaccinating and searching for other cases. The task of vaccinating the town negroes was a trying business, requiring much persuasion and with some of them force, to get them to submit to vaccination. I finally succeeded in my purpose with few exceptions. Must confess, had it not been that the people generally would suffer without thorough vaccination of the negroes, I believe I should have left them to suffer for their obstinacy and indifference.

Dr. Stinson, special agent, was here a part of January, and did much efficient work, vaccinating in different parts of the county. After Dr. Stinson left, I took charge of the situation in the county and continued the work, vaccinating at places and around where a new case developed. It was interesting to note the decrease in cases of smallpox and its spread, where people had been successfully vaccinated.

On April 1, could not find a case of smallpox in the county. April 10: To my surprise, learned a negro man had died of smallpox, eight or ten miles west of town and in a neighborhood where I had not known of a case. My first visit there, April 12, found at the house where the man had died, five sick—two of them had confluent, and the other three, had cases of smallpox, and that the sick had been visited by quite a number of persons.

Realizing the situation and the trouble at hand, I began work with determined effort to stamp it out or at least stop it from spreading. First, vaccinated all old and young living in houses close by the sick, then hunted up every person who I could learn had been exposed. Having vaccinated those, I continued the work by going from house to house and into fields where I could see persons at work, until I had vaccinated about all for miles around.

There were thirty-eight cases in this neighborhood. But not one had the disease whom I vaccinated in time for it to take before smallpox infection, notwithstanding quite a number slept in the houses with others with it.

For the benefit of any who may doubt vaccination preventing smallpox, I cite two instances, very convincing proof: In a house of four—mother and three grown daughters—mother by visiting her son, contracted the disease. I saw her early second day of fever. Vaccinated the three daughters at once. Mother developed bad case smallpox. Children slept in the room and attended their mother. Neither of them took it. The other instance: Mother and six children. Son came home with smallpox. I was there soon after. Vaccinated the other five children. Mother would not by any sort of persuasion sub-

mit to vaccination. Neither one of the children had the fever and the mother had a case of smallpox that came near causing her death.

On May 1 could not find any new cases in the county.

Was again called to see a case latter part of May. Negro woman, northeast of Monticello, where there were but few who had not been vaccinated. She was isolated and those who had not been vaccinated and others that it had failed to take on, were promptly attended to. No one else in the settlement had it.

Since, I have not heard of a case of smallpox in Jefferson county.

DOCTOR W. D. BUSH, AGENT.

The health of Lake county during the past year has been very good, therefore my report shall be quite short.

Lake County.

During the early spring months there were a few cases of acute colds and bronchitis. The summer months, some few cases of bowel troubles and malarial fever. Fever was of mild type and yielded readily to treatment. There were a few cases of dengue fever but they did not spread or become epidemic in Leesburg or the county.

Of smallpox, only a few cases at some of the turpentine camps in south end of county, in the summer; cases mild.

There have been no new cases of consumption or deaths during the year in this locality.

The sanitary conditions are good.

DOCTOR C. M. AUSLEY, AGENT.

The year 1905 was a busy one for the physicians of this county but the sickness was confined to minor ailments, with the exceptions of a few cases of typhoid fever which is now very prevalent in this locality, and several cases of diphtheria but the spread of this was prevented by isolation and disinfection.

Leon County.

The health of Tallahassee was unusually good during the summer, owing in a great measure to the precaution taken to guard against yellow fever, and consequent scarcity of mosquitoes.

There were no cases of smallpox reported in this county which is the first year in three we have been free of it.

In closing this I wish to thank you for myself and colleagues for the prompt and efficient work done by the bacteriological department. It is most convenient and useful in the quick diagnosis of certain diseases and we all agree that it is a most useful and necessary part of your Board.

DOCTOR R. T. WALKER, AGENT.

Levy County. During the past year our county has had less sickness than usual. There has been some malaria and a few cases of typhoid fever and some catarrhal and bowel troubles; but on the whole, the health of the county has been good. In January there were a few cases of varioloid at McKinnon, a turpentine camp near Rosewood, but it was soon stamped out.

The sanitary condition of the county is such as is usually found in country districts.

DOCTOR L. C. RUTER, AGENT.

Madison County. 1905 has been an unusually healthy year in Madison county. There have been no contagious diseases except two cases of diphtheria from which there was no spread.

The sanitary condition of the county has been good but the same cannot be said of the town. There is no system of sewerage here and during the summer months the carelessly disposed of excretions are very offensive and unhealthy.

We had some typhoid fever cases during the latter part of the fall.

DOCTOR J. N. FOGARTY, AGENT.

I herewith submit my report for Monroe county for the year 1905: Monroe County.

This has been a busy year for us, though not a fatal one. Early in January we were visited by an epidemic of lagrippe that lasted through the month of March. A vast number of our population was stricken but all had the good fortune to perfect a speedy recovery. There was not one case, to my knowledge, in which pneumonia played any part.

We have had in our midst some cases of measles, whooping cough and chicken pox, none effecting any great headway.

Dengue again in April, took charge of our community though not to such an extent as the epidemic of 1904. Our cases this year seemed to be of a subdued type. The mosquito inoculated fully 1,200 of our people, paying no heed to immunity in its travels; in fact the vast majority afflicted were "immunes." The rash appeared in seventy-five per cent of the number.

Even at any time during our whole season, when our neighbors of other cities were horror stricken, did we see the slightest suggestion of the infected stegomyia having attempted any inroads into our camp. Fortunate indeed have we been in this respect, in view of the fact that yellow fever has skirted on all sides of us.

Typhoid has claimed a few victims but did not at any time become so widespread as during the year previous.

Diphtheria is a stranger to us. We have had no cases for the past two winters and I sincerely hope that its dislike for us will continue.

As has been the occurrence in the past, we have had a few fatalities as the result of a tubercular infection. Within a very limited time now, I think the dead from tuberculosis in our community, will be numbered among the minority. The chief source of infection, to a very great extent, will have been stamped out. As has been well demonstrated to your satisfaction, our cigar fac-

tories have furnished us with at least ninety per cent. of our tubercular certificates. Now that you have enforced the law compelling all factories to furnish one cuspidor for each two workmen, the chance for infection has become nil. Every factory, with no exception, has complied with your demands. The manufacturers are grateful to you for having taken up the matter. Dollar after dollar has been saved to them in scrap material. What was formerly a loss to them can now be used. Through this step the workmen themselves have seen their salvation and lend their hearty support. I have advised as a further protection to the preservation of their health that the "Union" debar from the table in the factory any workman whom a competent physician may declare at any time to be infected with tuberculosis and as a means of support for these unfortunates, that the "Union" allow each of such workmen a small amount weekly. This the "Union" is giving its serious attention to and I believe will have it brought before their meetings for action. What a blessing for the cigarmakers if such a suggestion is put into operation.

Since my last report five pigs have found their way into our country. It is needless to say they were promptly and severely dealt with.

As a result of the Tampa Fair, in December, one case of smallpox crept into our midst. As soon as diagnosis was made by yourself, the City Health Board assumed charge and placed a strict quarantine around the focus. But three cases afterward developed and these in the same family. Whatever saved us from an epidemic is yet undecided. The original case was at large until the fifth day of eruption. Only another illustration of the fact that "those whom God keeps, are well kept." For fear there might have been some developments, at your order, the Isolation Hospital, at some two or three hundred dollars expense to the Board, was put in readiness, but fortunately we found no need for using it. Your order to vaccinate all first or second class passengers from

Tampa who cannot show a mark of recent successful vaccination, is being carried out to the present date.

I here beg to make mention of the fact that ninety-five per cent. of the traveling public, black and white, show signs of recent vaccination.

I also beg to call your attention to the efficient work of the city's chief of excavation department. I think that by next summer we will have our city in good sanitary condition.

Last, but not least, I wish to commend to you Sanitary Policeman Roland Curry. His efforts have been untiring and effectual since date of appointment. With precision, he is fearless in line of duty and impartial in his criticisms. I feel assured that you could have secured none other better to fill the place.

DOCTOR D. G. HUMPHRIES, AGENT.

In compliance with your request, I take pleasure in submitting herewith my report of the health conditions of Nassau County.
Nassau County.

The year just passed has been an unusually healthy year. The sickness throughout the county was confined to a few cases of typhoid and remittent malarial fevers, these latter fevers being of a particularly mild type. There were a few cases of dengue fever brought into the county toward the close of the summer; these readily yielded to the usual treatment and there was no spread of the disease.

We have not been so fortunate however, in regard to diphtheria, for, notwithstanding the concerted efforts of our physicians, cases continue to spring up here and there. The disease has been confined almost entirely to the city of Fernandina. The continuance of this disease has been and is still a matter of much concern to our people but I hope with the full cooperation of the municipal authorities, that it will soon be eradicated.

There are very few cases of pulmonary tuberculosis in the county, the larger portion being among the negroes.

DOCTOR L. F. HENLEY, AGENT.

Polk County.

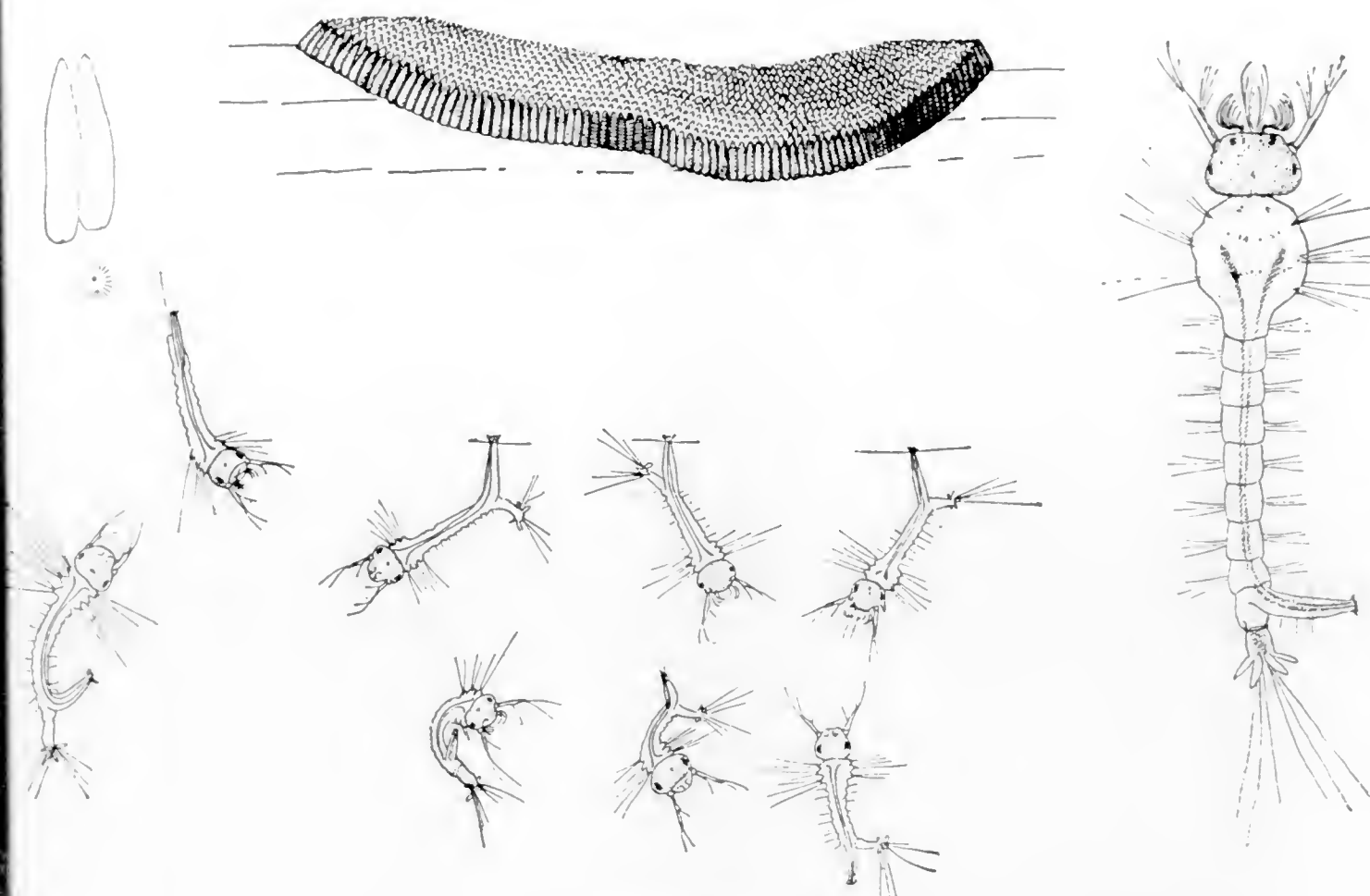
The health of Polk county for 1905 has been good with the exception of a few cases of measles and typhoid fever. No other severe sickness except a widespread epidemic of dengue fever of a severe type which lasted six months.

The sanitary conditions are fairly good.

DOCTOR E. W. WARREN, AGENT.

Putnam County.

The health of Putnam county for the past year has been exceptionally good, especially so as regards infectious and contagious diseases. One case of smallpox and about fifty cases of dengue constitute our record. Only a very few cases of severe typhoid fever have occurred and less malaria than usual. We have not any great amount of tuberculosis in this county, extremely few cases originating here. A lot of people come here from the northern and eastern States with tuberculosis, asthma and hay fever, most of whom seem to be greatly benefitted by a few months residence here. It seems that about eighteen or twenty years ago there was a great influx of northern people to this county, all looking for health; most of them were suffering from tuberculosis. I could make a record of a number of authentic cases who eagerly tell you they came on a stretcher or bed or unable to walk but a few steps, whose physicians had told them they could live only a few weeks or a few months at the best. They are whole and strong to-day, showing little evidence of having suffered from consumption at all. These are not imaginary cases but men and women whose addresses can be given and who have been the means of bringing many more here since they came. We have one physician who came here seventeen years ago, who, in a conversation a few days ago, told me that he came not expecting to live long but in two months his cough began to get lighter and eventually stopped. He is a very hard working man now and is whole and strong.

*Culex pungens.*

(Egg mass, with enlarged eggs at left, and young larvæ below.)

*Anopheles Quadrimaculatus.*

(Group of 44 eggs deposited by a single female.)

The City of Palatka has made a very important move this year in a sanitary way by completing a sewer system for the city which is being followed now by a municipal water plant. When that is done it is the intention to pave all leading business streets with vitrified brick. There have been some little whisperings of a hospital to be established here but nothing definite has been done.

The people of this county feel very grateful to the State Board of Health for the protection given the entire State in the recent epidemic of yellow fever at Pensacola. At the beginning of the outbreak there, some uneasiness was felt here about whether it could be confined there, owing to the very evident fact that New Orleans had been unable to confine it within her limits, but that soon passed.

DOCTOR J. M. IRWIN, AGENT.

I am pleased to say that the sanitary conditions of St. John's county seem to be quite up to the usual standard. There are continually many violations of State laws and rules of your honorable Board but probably no more than must unfortunately of necessity occur in all parts of the State, owing to the impossibility of accurately enforcing all laws.

St. Johns
County.

There were four cases of diphtheria reported during the year. One by Dr. M. W. Seagears, and three by Dr. DeWitt Webb. All of these were from the same focus. Antitoxin was used in all and all recovered.

During the summer quite a number of cases of smallpox occurred in the northern part of the county. One of these cases was called to my attention and by the prompt and efficient work of a representative of your Board whom you sent to look after the situation, there were no more cases. Two other cases of smallpox occurred—one white and one colored. Both were in St. Augustine and both infections were traced to other regions.

DOCTOR L. J. LOCKEY, AGENT.

Sumter
County.

As a general rule the health of Sumter county shows an improvement over the preceding year. Of infectious diseases, one case of whooping cough at Wildwood and a few cases of smallpox at Wildwood, both of which were easily controlled.

General malaria shows a decline on account of drainage and use of screens. No dengue fever has been reported at all in this county.

DOCTOR W. C. WHITE, AGENT.

Suwannee
County.

Relative to the sanitary condition of Suwannee county, will say as a whole the county is in an exceptionally healthy condition. In Live Oak, the drainage of the town is very bad. There are numbers of open cesspools and ponds of stagnant water all over the place. The town is now taking steps to put in a complete sewerage system which in a great measure will correct these evils. The town will also take the water in charge and we have hopes of a better supply than heretofore.

The only disease of a contagious nature that has come to my notice in the county for the past year has been a few sporadic cases of diphtheria, there being one death from this source.

I would further report to you that it is impossible to get the physicians to report the deaths and births coming under their charge.

General health
conditions.

From the above report and an analysis of data given by county sanitary agents and other friends who have written on the subject, the health of the State in the interior counties appears to have been exceptionally good for the past year, but owing, however, to an extended prevalence of dengue in the peninsular southernmost counties, the citizens of these sections suffered much physical discomfort which although only a temporary sickness

and never fatal, entailed much material annoyance by an enforced confinement to the house and absence from business. Likewise, the occurrence of yellow fever at Pensacola during the months of September, October and a portion of November, introduced through unknown sources from New Orleans, tended to increase temporarily the morbidity and death rate of that city, yet in the total death rate for the year at Pensacola, the ratio of deaths per 1,000 of population, does not appear to be uncommonly enlarged over that of former years. It is a matter of note and has before been commented upon that during periods of epidemic prevalence, other fatalities seemingly decrease in number and the livery of the prevailing disorder appears to clothe any deviation from normal health. Sickness, however trivial, is some expense to the individual and its sequences are always indirectly a pecuniary loss to the commonwealth.

It should need no argument therefore, to convince any thoughtful person that individual hygiene and municipal sanitation are not only necessary essentials to personal comfort, happiness and prosperity, but are needful to the upbuilding and commercial thrift of a community or State. The sequences of illness, such as confinement to bed or house, which means a temporary suspension of the bread-winning ability and support of the family, with other attendant expenses of medical care, medicines, nursing and required articles of diet, all serve to deplete the family purse when already light and make harder the struggle for existence. The great majority of the ills which afflict the human kind are preventable if only due regard is paid to Nature's warnings and to the advice of those who under the law are selected to counsel in the matter of domestic as well as municipal hygienic living. To avert sickness and maintain a sound physique is the object sought in the scientific study of the subject by medical men of to-day and is engaging closer thought and attention from the medical profession than is medication. The old adage that "An ounce of prevention is worth a pound of cure" if observed and heeded, would prevent

Individual
hygiene.

much unnecessary suffering, costly sickness and commercial loss, for every citizen is a contributor to the development of a community either through manual labor or mental energy. Each healthy wage-earner by muscle or brain may be a developer in the intellectual and commercial growth of any community so long as the brain and body is kept in a condition by which salutary thought and action can combine to produce fruitful results. Intelligent immigration and therefore desirable settlers, are largely, if not altogether attracted to a State or place from the reputed health conditions existing in such locality. The first questions usually asked by those proposing to change residence or seeking investment, are concerning atmospheric conditions, purity of climate, freedom from malaria, methods of disposal of domestic waste, and the wholesomeness of drinking water. If satisfactory answers cannot be given to each of these inquiries, such places are passed by as undesirable for permanent abiding homes neither do they attract transient visitors. The nation or State can have no higher or loftier ambition nor perform a more important duty to the people than didactically in the schools and by tract literature freely distributed, endeavor to so educate the citizens of this country that beauty of form, robustness of constitution and clearness of intellect may be seen in a more general physical and mental development of the men and women of this country. The day is not distant when sickness, except from accidents, will be viewed as the result of individual and municipal neglect and disregard of natural laws of hygiene and in sanitary requirements, and the individual or the community who purposely antagonizes advice or counsel from duly constituted health officials in matter of health ordinances, will be looked upon as narrow in intellect and actuated solely by a determined spirit of prejudice and opposition. They will not only bring contempt upon themselves from the outside world, but will surely and seriously injure their town by pursuing such a course.

There have been reported to the executive office during the year 1905, 3,508 marriages, 4,601 births, and 2,788 deaths. Of this number of deaths, 884 were white males, 743 white females, 620 colored males, and 541 colored females. These figures are not vouched for as accurately representing the total life movement of the population of the State, for the reason that the physicians of the State upon whom the State Health Officer must rely for reports of births and deaths have generally been indifferent in making reports of this kind and have for the most part ignored the requirements of the State statute which is mandatory in its provisions that all births and deaths occurring in the State of Florida shall be immediately reported to the State Board of Health. Various inducements have been offered to coax and urge the physicians of Florida to fulfill a professional obligation as well as a duty of a civic character by giving valuable information of this kind which can be gotten through no other source nor in any other manner, but it seems that no amount of pleading, soliciting or coaxing will avail, notwithstanding the State Board of Health has agreed to pay 10 cents for each birth and death reported to the office. This amount is small, it is true, but it is as much as the Board can offer for such service, especially as blanks are supplied gratis and moreover the statute of the State expects that these statistics shall be rendered without compensation. Unless the physicians of Florida will give their co-operation to this work, and view the subject as a professional duty and one of State pride, the effort to lay before the people of Florida each year a statement of births and deaths, will have to be abandoned because a partial statement is deceptive, untruthful and unreliable. Comparisons of mortality for consecutive years cannot be made with any accuracy, neither is it possible to determine whether preventive medicine as urged by the Board and taught to the people, is successful in results unless the statistics are accurate. The State Health Officer does not propose to enter into litigation to enforce the statute which the people—and the medical profession

Marriages,
births and
deaths.

Vital
statistics.

is an integral part of the body politic of the State—have through their representatives ordained, for an enforced compliance with law and especially of a measure which has for its object a purely humanitarian purpose, will never be satisfactorily observed or performed when not cheerfully discharged. A hearty and enthusiastic spirit of co-operation from each physician in the State, manifested by a zealous effort to build up the health reputation of the commonwealth, must enter into the earnestness of the work before vital statistics will avail anything or be profitable for comparison or argument. A further effort will be made during the coming year to interest and to appeal to the patriotism of the profession in this respect and it is hoped that a better report of Vital Statistics may be given at the end of 1906.

Deaths caused
by preventable
diseases.

From an analysis of the above information respecting health conditions in the State, it is learned that of the diseases which are generally termed as preventable, pulmonary tuberculosis (consumption) has caused 170 deaths; likewise, smallpox 5 deaths; diphtheria 18 deaths; Malaria 42, and yellow fever 82. It almost seems a paradox and burlesque of terms to speak of deaths from preventable diseases, for if preventable, why should sickness from such sources occur, much less death? If smallpox can be prevented by vaccination (and evidence and proof have repeatedly been submitted in these reports of the efficacy of this protective measure against a most loathsome disorder) and anti-diphtheritic serum (diphtheria antitoxin) will not only cure but will inhibit attacks of diphtheria; if screening and observing due precaution against the bite of infected mosquitoes will avert an attack of malarial and yellow fever, then it would seem that the occurrence of these diseases is altogether unnecessary and is due to human stupidity, ignorance or a willful refusal to observe and adopt measures which practical experience has taught to be necessary to prevention of these disorders.

Smallpox has been reported in the counties of Alachua, Bradford, Citrus, Clay, Columbia, Dade, DeSoto, Duval,

Escambia, Gadsden, Hamilton, Hernando, Hillsboro, Smallpox. Holmes, Jackson, Jefferson, Lake, Levy, Manatee, Marion, Nassau, Osceola, Pasco, Polk, Putnam, Santa Rosa, St. Johns, Sumter, Suwannee and Walton, and it is estimated that there have been cared for and treated by the State Board of Health and through its instrumentality 1,193 cases of this sickness. Almost invariably the trouble has been traced to the immediate nearby States; sometimes by repeated reinfection of border line communities. Very interesting and instructive information on this subject can be had from the special reports of the several assistants to the State Health Officer, whose experience in treating and in the management of smallpox cases has been extensive and therefore exceedingly valuable.

The executive office has adhered firmly to the policy laid down for the management of smallpox when the Board was organized some seventeen years ago, and has hewn straight to the line of vaccination as the only protective and preventive measure against acquiring the disease or arresting its spread when introduced into a community. The State Board of Health has thoroughly approved of this course of action, and has, and will still offer to the people of Florida an insurance against smallpox without tax for premium or other monetary exactions, but on the other hand guaranteeing dividends in exemption from the disease which in value of mental comfort and contentment far over-balances the slight physical inconvenience which the trivial operation of vaccination imposes. The State offers this protection against smallpox, free, both by bovine virus furnished and by the expert application of the same; therefore, when the warning is not heeded, nor the offer of the State accepted, people have only themselves to blame if they or their families contract smallpox from hidden sources, nor should they enter objections to isolation, quarantine and other inconveniences necessarily enforced against them for the protection of their neighbors and which through their own neglect they have made necessary. This proposition has been plainly submitted for seventeen years and has been

Free
vaccination.

argued not only in articles from the executive office but in the legislative halls of the State. The State through the State Board of Health, annually expends thousands of dollars unnecessarily in treating and caring for a disease which is obviously preventable and can altogether be suppressed if vaccination is made a compulsory feature of management. Until this enactment is insisted upon and made the first principle of protection against this particular contagious disorder, spasmodic frights and semi-panics may be expected in communities when smallpox is introduced from without the State border. In a thoroughly and successfully vaccinated community a case of smallpox should give no more uneasiness than a case of imported malaria, where the Anopheles (malarial mosquito) has no existence. Under the same conditions of protection, there is as little likelihood of one disease spreading as the other.

Diphtheria.

Diphtheria has been reported from the counties of Duval, Escambia, Hillsborough, Leon, Madison, Nassau, St. Johns, and Suwannee, numbering in all 18 deaths. Where and when the antitoxic serum has been early and unsparingly administered, recoveries have been notable and prevention of further spread has been very appreciable. To indigent patients of this disease, the State Board of Health gratuitously furnishes the necessary amount of antitoxin on the certificate of the attending physician. During the past year bills of this nature amounting to \$700.00 have been paid from the Board's treasury and many lives have been saved through this beneficent action of the State. The question of financial inability of the patient to purchase this somewhat costly remedy, is left entirely to the attending physician who certifies to the indigency of the patient. Any druggist can furnish the serum and under an agreement with the State Board of Health, dispense the article at manufacturer's list price, being satisfied with a profit which the manufacturer's discount allows. Under similar conditions the other antitoxins, of *tetanus*, *streptococcus*, etc., are likewise furnished to indigent citizens of the State.

It is to be regretted that the total number of consumptive (pulmonary tuberculosis) patients living in Florida is not known and it is only when a death from this trouble occurs, that the executive officer learns of the fact. Therefore, no estimate or conjecture can be made as to the curative or beneficial effects of a climate rich in resinous and lung healing qualities, when deaths alone are reported. The fatalities from this cause as reported to the executive office, have been 170. The length of residence in Florida of natives of other States varies from a few weeks to several years. The open air plan of treatment for consumptives seems to be the only rational method for prolonging life and offers possibly the best chance for ultimate healing of lung tissue. It has been before suggested for the consideration of the law-makers of the State that the State Board of Health might be authorized to make trials of open air sanatoria for both native consumptives—those who have acquired the disease by contact with visitors from other States—and invalids from northern climes. It was proposed that the legislature should make an appropriation for this purpose and that such sanatoria could with great benefit be located in one of the pine forest districts of the State. The idea, however, did not seem to meet with approval, leastwise no action has as yet been taken by succeeding legislatures on the recommendation. As much has been done as has been possible for the State Board of Health to accomplish in lessening the spread of pulmonary tuberculosis, and it is thought a great deal in a preventive way has been attained by teaching the people the danger arising from promiscuous expectoration on floors and walls of public buildings and public vehicles, and on sidewalks, and by issuing warnings through posters widely distributed, against a custom which, besides being highly dangerous, is a filthy practice. It is gratifying to state that throughout the State there has been a constantly increasing sentiment against the "spitting habit" and that the floors of public buildings and vehicles, as also street and railroad cars, present a more cleanly appear-

Pulmonary
Tuberculosis.Open air
sanatoria.The spitting
habit.

ance and an absence of this defilement, as well as the sidewalks in the larger and more populous cities. The State Health Officer has had an opportunity to observe this improvement in cleanly methods, more especially in his home town, where formerly there was a disregard of protective measures against the spread of consumption through dried sputum scattered rather too freely about the place. All cigar manufactories in Key West are now supplied with cuspidors and in some it is made a cause of dismissal for any operative to spit on the floors of the building. The cafes—which are numerous—are also furnished with spittoons or cuspidors and are generally used. Everywhere are seen the printed regulations of the State Board of Health prohibiting promiscuous spitting and daily applications are received from all over the State for “cards” to be placed in conspicuous places where the attention of the public may be attracted to the prohibition and requirement of the Board in this respect. It is needless to mention that all such requests met with prompt compliance and were quickly dispatched, for the executive office is ever ready to give assistance in all sanitary reforms and appreciates any co-operative aid which individual citizens or the public in general may offer and in this connection it is desired to mention with commending approval and grateful appreciation for the unselfish and philanthropical efforts of Dr. John E. Ennis of Narcoossee in Osceola county, in assisting consumptive visitors to a more comfortable manner of living and affording such invalids an opportunity to prolong life, as well as to seek permanent relief from a supposed incurable trouble. It has not been the good fortune of the State Health Officer to visit this sanatorium of Dr. Ennis; time nor opportunity ever having seemed to make it convenient to do so, but much delightful correspondence has been had with the doctor on the subject in which plans for the extension of his humanitarian work have been unfolded. Too much praise cannot be given to Dr. Ennis for his unselfish desire to help those who, because of their infection, find it difficult to obtain needful and necessary

Efforts of Dr.
Ennis of Nar-
coossee to aid
consumptives.

accommodations at the larger resorts of the State and whose affliction makes them timid and retiring. At the request of the State Health Officer, Dr. Hiram Byrd, first assistant to the State Health Officer, visited Dr. Ennis and in his report on his visit, thus speaks very entertainingly and pleasantly of the doctor and his anticipation for the future:

Dr. J. E. Ennis, who is a very philanthropic old gentleman, came to Narcoossee several years ago at the instance of the late Henry Disston, who was at that time trying to develop that country. The Doctor had tuberculosis when he came from Illinois, but in the course of a few years, he recovered. He then conceived the idea that a place where the poor people, suffering from tuberculosis could come and camp would be a blessing to many. So he opened a tract in front of his house, putting up a wind-mill to supply water, and opened a room in his house for a library and writing room, and then wrote through *Everybody's Magazine* inviting tuberculous subjects to come down and bring their tents and do their own cooking and at no cost except groceries. He did this much for them gratis. He at once began to get applicants but all wanted to board. His wife took hold then and said she would help him and they would board them at actual cost.

During the winter of 1904-5 he had some fifteen patients all of which improved. Since then it has been organized as a part of the work of the Sunshine Society and is being pushed by some Northern ladies and friends of the cause, prominent among which is Mr. Ridgeway of *Everybody's Magazine*.

They have now bought a nice tract with a house and grove and small pinery and are fixing it up for occupancy. I believe they have not received but one or two patients as yet—have not been ready for them—though they have had a number of applications. Dr. Ennis wrote me of getting five applications in one mail.

The following letter from Dr. Ennis to Dr. Byrd together with an extract from the Kissimmee Valley Gazette, following this letter, may be interesting as showing to some extent the character of the work contemplated and instituted by Dr. Ennis at Narcoossee.

Dear Doctor:

The enclosed circular gives main facts as to the parties mostly interested in the Home and furnishing the means to establish it. In addition to our local officers of the Narcoossee

Branch of the Tribune Sunshine Society, we have an advisory board of the following ladies:

Mrs. F. B. Walker, New Haven, Conn.
 Mrs. L. M. Halsey, Williamstown, N. J.
 Dr. Addie Wallerstein, New York.
 Mrs. Pierrepont Greene, New York.
 Mrs. W. F. Bailey, Summit, N. J.
 Mrs. Clarence Burns, New York.
 Mrs. Jane Pierce, New York.
 Mrs. Thos. McLean, Conant, Fla.

We now own the Brewer place on Lake Hendon. It consists of five acres, nearly all a lawn, planted in semi-tropical plants. The residence used as headquarters is an elegant cottage with every modern convenience. The place contains a pinery of one-half acre, now fruiting. This will be enlarged to furnish easy out door labor to some lacking means. A pretty wooded park of eleven acres contiguous to the Home, has been donated to our corporation and will be improved in near future.

It is intended that all patients shall live in tents, provided and furnished by our association.

The Medical Staff will consist of
 Jno. E. Ennis, M. D., residing physician.
 M. J. Hicks, M. D., consulting physician.
 F. G. Thomason, M. D., consulting physician.

Rates will be \$1.00 per diem for board.

Testimonials required from all as to moral character.

Only incipient cases desired.

The editor of the Kissimmee Valley Gazette is to come over after we secure a charter and will write the place up.

First patient here is a Mr. A. H. Snyder of Polk county, Florida. It is an advanced case but I feel hopeful as to his recovery.

Yours truly,

JOHN E. ENNIS.

THE NARCOOSSEE SUNSHINE HOME.

ESTABLISHED FOR CONSUMPTIVES BY THE NARCOOSSEE LOCAL BRANCH
 OF THE TRIBUNE SUNSHINE SOCIETY OF NEW YORK.

From the Kissimmee Valley Gazette. January 19, 1906.

In January of last year a few members of this association improved a tract of pine land on the outskirts of the village and supplied it with water; also furnished a cottage quite near the camp, for the free use of any consumptive who could give proper reference as to moral character. The society further promised to furnish the camp with reading matter, a liberal sup-

ply of fruit, and also to carry mail and provisions daily to the invalids, all free of any charge.

Everybody's Magazine noted the offer and endorsed the plan. The immense circulation of this magazine in every section of our country, with its high standing for square dealing, gave the greatest publicity to the effort, and in consequence, many more applications were received than the limited space would accommodate.

The invalids cared for during the winter were quite generally an educated, refined class, accustomed to good homes and pleasant environments.

The treatment consisted in living constantly in the open air, careful attention to hygiene, strict standard of sanitation, the most nutritive diet obtainable, restricted exercise, amusements, etc. The experiment proved positively what is affirmed by our physicians and believed by our citizens, that at any point in the elevated pine region of Florida, consumption is a curable disease, provided proper facilities are had and the patient will remain a sufficient length of time.

The only incurable cases are those so advanced that there is not sufficient lung tissue left, to properly decarbonize the blood, or where the restorative powers of the system are practically destroyed by the excessive use of stimulants, or immoral life of the patient or ancestors.

We had numerous visitors during the season, including two from one of the officials of our State Board of Health. The assistance of the State Board was invaluable, and highly appreciated. Dr. H. Byrd made numerous microscopical examinations of the sputum of the patients, enabling us to confidently advise each case of a rapid improvement, and to some that they were once more free of tuberculosis.

Among our visitors was Mrs. Jane Pierce, secretary of the Tribune Sunshine Society, a philanthropic association with local branches in every State, and in many foreign countries. This lady came on a visit to inspect the work of our local society, as well as to organize others in the State. She was so impressed with our camp, its management, and the manifest improvement of the invalids she conversed with, that on her return to New York, she suggested to the president, Mrs. Clara Burns, and the advisory board—made up of prominent northern ladies—that they endorse our efforts and provide means to assist our branch society in establishing a Sunshine Home for Consumptives at this point, of sufficient size and facilities to be an important factor in the noble effort the medical profession of America is now making to stamp out tubercular diseases. At the semi-annual meeting of the general society in New York in which many delegates from other States were present, her suggestions were

adopted and pledges given by many local societies to support it. Already the Brewer property—a charming place on Lake Hendon—has been purchased, its repair and improvement commenced, and a wooded park of twelve acres donated. This, perhaps, is the first time that an institution of this magnitude for treating disease exclusively, has been planned, inaugurated, established and will be carried on exclusively by women. No salary is paid any official; all serve gratuitously. The rates will be made on cost of food and ordinary expense of maintaining house and grounds.

The association will be incorporated, the application being now in the hands of P. A. Vans Agnew, Esq., who, in an advisory way, has been of great service to the society.

The officers of our local society, "The Narcoossee Tribune Sunshine Society," are: President, Mrs. W. J. S. Carr; vice-president, Mrs. F. B. Best; treasurer and secretary, Mrs. M. L. Ennis, Miss Elizabeth Sears.

A description of the new property, list of officers, facilities for treatment, etc., will be given at a later period.

JNO. E. ENNIS.

U. S. Navy
Medical Department open
air treatment
at Pensacola.

The "open air camp" for the treatment of consumptive attaches of the Navy which was established by the United States Navy Medical Department two or three years ago, near the Navy Yard at Pensacola, does not seem to meet with the success which was anticipated, in the treatment of pulmonary troubles. An effort has been frequently made to obtain data on this subject by the State's county sanitary agent of Escambia county—Dr. Warren E. Anderson of Pensacola—from the surgeon in charge of the Naval Hospital at the Navy Yard but unfortunately the regulations of the U. S. Navy Department seem to forbid giving any information in regard to this or any other treatment of sick employees of the Navy and this prohibition is to be regretted, for the profession and Boards of Health are intensely interested in any remedial measure or ameliorating condition by which sufferers from pulmonary tuberculosis can either be cured or have their existence made more comfortable while life is being prolonged. The establishment of this "open air camp" for the treatment of pulmonary tuberculosis patients, in Florida and in the piney woods of the State, was considered at the time when instituted, a compliment to the

State's reputation as a health-sustaining and life-prolonging natural sanatorium, and was welcomed with delight by the State Health Department of Florida as an effort in the right direction in seeking a permanent cure, if such treatment could at all be curative, for this class of sufferers. Being under the protective care and supervision of the United States Navy, with an abundance of money to prosecute the experiment, it was hoped that the results obtained either in cure or improvement, might be such as to warrant the State Board of Health in establishing a similar institution for the State's indigent sufferers from this disease. Dr. Anderson tells the executive office that really the only information in regard to the "open air" camp at the Pensacola Naval Reservation, which he has been able to obtain, comes through the undertakers in their frequent requests for transportation permits to ship bodies of those dying at the Navy Yard from pulmonary tuberculosis.

During the spring and summer of last year, dengue gave much worry and annoyance to the southern peninsular counties of Monroe, Hillsborough and Dade. Duval county also suffered from a visitation of this painful trouble. While there were no fatalities—for dengue is rarely if ever fatal, except in the extremes of life—yet Key West, Tampa, Miami, and Jacksonville had a great many sick people at one time or another from this uncomfortable illness, which although brief in length of confinement, is sharp in attack and painful while it lasts.

There were about 1,200 cases of dengue at Key West during a period from April to October with no deaths. The characteristic rash of dengue which is the chief diagnostic system of the disease, was present in about seventy-five per cent. of the cases.

At Tampa, the disease made its appearance in July, probably about the middle of the month, having been traced to direct importation from Key West through Port Tampa and Port Tampa City, where the first cases occurred. From July to October the disease prevailed in Tampa and its environs until causing probably, accord-

Dengue fever.

Key West.

Tampa.

ing to various estimates (for very imperfect reports of cases were made to the city authorities), about 5,000 cases.

Miami.

At Miami, dengue appeared in July and lasted to October. There were no deaths. Dr. Jackson estimates that there were about 3,500 to 4,000 cases and if the walking cases are included, the number would be near 6,000, for numbers of people had it twice.

Jacksonville.

In Jacksonville, dengue appeared in the season, very probably being imported from the southern counties. It prevailed from August to October and is estimated to have temporarily invalidated about 1,500 persons.

Dengue and yellow fever at Tampa.

The appearance of dengue at Tampa almost simultaneously with the case of yellow fever at West Tampa which was imported from New Orleans about July 22, gave rise to some speculation amongst the timid, and to some doubt as well, in regard to the true character of the trouble, which spread rapidly in epidemic form. The State Health Officer was able, however, to quickly assure the people of its benign character and to convince the more skeptical of the profession and of the laity that the occurrence of dengue at the same time as the Italian with yellow fever who came from New Orleans, was a mere coincidence and that the true nature of the sickness was recognized and accounted for. Notwithstanding the firm conviction of the State Health Officer that the character of the malady with which he was dealing was dengue and dengue only, and his abounding faith in the accuracy of his diagnosis, yet much worry was caused by the expressed doubts of some and the almost persistent insistence of others, that the disease was yellow fever.

Prof. John Guiteras of Havana, yellow fever expert, at Tampa.

Valuable assistance was rendered the State Health Officer and the people of Tampa by Prof. John Guiteras, who, about this period of contention, arrived in Tampa, and promptly confirmed the diagnosis of dengue as the prevailing epidemic trouble then existing at Tampa, which had previously been insisted upon by the State Health Officer and his assistant, Dr. Chas W. Bartlett. Considering the fact that in several of the cases of dengue,



Scene on grounds of Sanitarium for treatment of tuberculosis, Narcoossee, Fla.

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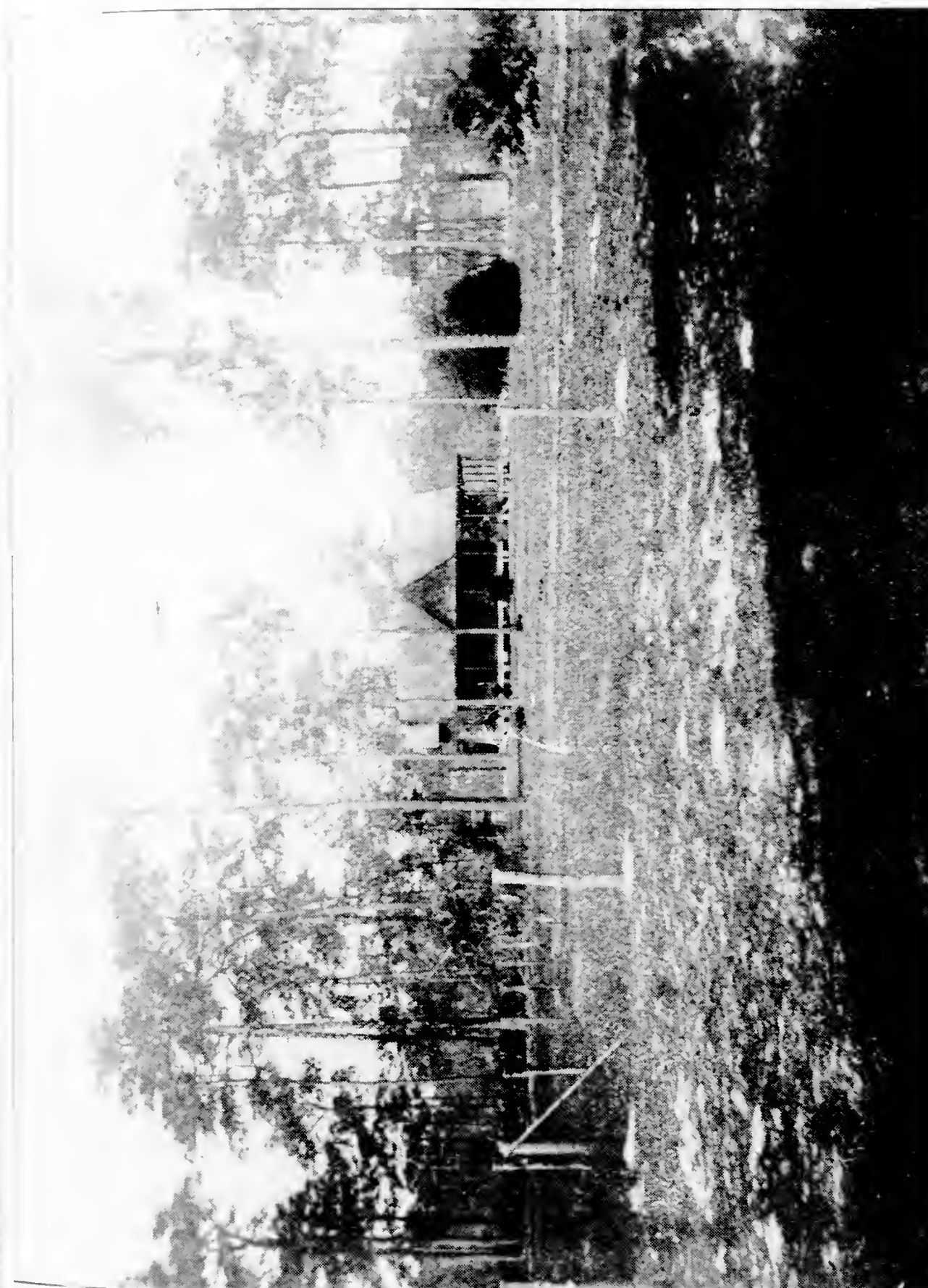
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albumen was found in the urine of patients having unusually high temperature—which condition has always and heretofore been considered as especially distinguishing yellow fever—it can be appreciated that the task of determining what was the sickness that prevailed in epidemic form at Tampa, was a responsibility which devolved with unusual gravity upon the State Health Officer to decide and was keenly felt by him, for on the one hand, should he have been mistaken in his conclusions, a spread of the sickness not only in Tampa but elsewhere, should the disease have been yellow fever, meant great disaster both in life and commercial interests which could not be estimated nor confined to the original locality but in which the whole State would be jointly interested and would proportionately suffer; on the other hand, should yellow fever have been announced on a mere incidental observation of one or two symptoms and without careful study of a number of cases, without fatality, a panic of fright would have arisen resulting in incalculable business loss not only to the city of Tampa proper but to neighboring towns in the immediate vicinity of Tampa. It is a pleasure therefore to speak of the perfect calmness of the people of Tampa as a community during this period, who, under the strain and trying exigency of the occasion, manifested absolute confidence and trust in the decision of and management by the State Health Officer, both after the discovery of the case of yellow fever which had been imported from New Orleans into West Tampa, and likewise after dengue commenced to strike right and left through the town and place numbers of citizens on beds of racking pain or compelled an unwilling confinement to the house for a few days. The State Health Officer appreciated this almost childlike faith and belief in his ability to meet the demands of the occasion, and will ever be grateful beyond any expression of adequate thanks for the hearty spirit of co-operation which so emphasized the conduct of the people of Tampa and their treatment of him.

Malaria is reported to have caused 42 deaths in the Malaria.

State during the year 1905. As malaria is the type of infectious diseases which depends alone upon an intermediary host for its transmission to the human, it should therefore be the most easily avoided and prevented. It would seem that if sufficient heed is given to the teachings of the health authorities and to warnings from this office in regard to what are precautions necessary to be taken to prevent mosquitoes of the *Anopheles* genus from becoming infected, and when infected may be hindered in transmitting this infection by proper screening of both the sick and well, an illness which has heretofore been so generally prevalent everywhere, can be avoided and in a systematic way and by well directed effort, the cause of propagation be effectually and effectively destroyed. The malarial parasite is a demonstrated factor in producing the different types of the disease. An examination under the microscope, of the blood of a malarial patient will indicate with positiveness the character of the seizure which will occur upon the development in the red blood cell of the particular parasite which produces the several forms of the disease. Not only so, but the time of seizure itself, as manifested by a chill, can be predicted to almost the exact period of the day by the stage of growth of the parasite. According to reports from the interior counties of the State, the pleasing fact is learned that there has been less sickness due to so-called malaria this past summer than is usual in those sections where formerly it prevailed with great frequency. There is good reason to believe that the lessening of attacks of malarial sickness is due to the widely distributed literature which the State Board of Health has from time to time scattered over the State, for with ordinary care in screening houses, sleeping under mosquito nets, and above all else vigilantly prosecuting a warfare against mosquitoes by destroying their breeding places, there is no reason why people should longer be subjected to an illness which is clearly preventable, or be annoyed by irritating insects to their discomfort and vexation. The day is fast approaching in sanitary advancement when to have chills and fever or

to permit a malarious condition to exist, will be considered as much of a disgrace to the individual or community, as it is now thought to be a reproach to have smallpox.

Yellow fever existed in the State during 1905, sporadically in West Tampa—one case—and prevailed in Pensacola in epidemic form during the months of September, October and a portion of November. The introduction of the disease in both instances was from New Orleans. Victor Vitello, an Italian, left New Orleans about the 20th of July and reached West Tampa about the night of July 21. He was sick when he reached West Tampa and sent for Dr. Bartlett who usually professionally attended the Italian colony at Tampa, but who unfortunately when called was occupied with a midwifery case and could not respond at the time. Later on, the doctor received a message that he need not come as another attendant had been secured, and the incident passed from his mind. From Friday the 21st, to Tuesday the 25th, Vitello was medicated for "cold," notwithstanding the fact that the daily press of Tampa had announced that yellow fever existed in New Orleans and that the Italian quarter of that city was the infected district. The doctor attending Vitello afterward acknowledged to the State Health Officer that he knew that Vitello came from New Orleans for he had so informed him, and that he knew also of yellow fever being in New Orleans from published press dispatches, on the 22nd instant, but that he had not associated the two facts together and that he had discharged the Italian on the 24th instant as cured, his bill, which was \$6.00, having been paid, which seemed to be his main purpose. He made no examination of Vitello's urine nor recorded any clinical data.

Just how Dr. Bartlett discovered Vitello and the excellent detective work pursued in order to find the man, who was being hid by his countrymen, is minutely, graphically and interestingly told in the report of Dr. Bartlett, as agent of the State Board of Health for Hillsborough county, elsewhere given in this paper. The quick recogni-

Yellow fever.

West Tampa.

Dr. Bartlett
discovers
Vitello.

tion of the nature of the sickness of the Italian by Dr. Bartlett and the prompt measures taken by him to screen the patient and to destroy any infectible mosquitoes in the house, most surely suppressed the disease in the incipency of introduction, and demonstrated for the first time in the United States that yellow fever when recognized in its inceptive stage and managed and controlled according to the principles taught by the law of mosquito transmission—the *Stegomyia fasciata* being the intermediary host to man—is as easy to check and restrain as is malaria or any other of the infectious diseases. Although there were many of Vitello's relatives living in the same house with him, who were in almost hourly attendance, and who were non-immune to yellow fever, there were no other cases in the family nor in West Tampa and its vicinity, although aside from the precautions of living within screened rooms and sleeping under a mosquito net and having bi-daily fumigation to destroy possibly infected mosquitoes before the twelfth day of development of the supposed ultra-microscopical parasite in the female mosquito, there were no especial measures observed in regard to sequestration of the patient.

Management
of yellow fever
case at West
Tampa by
State Health
Officer.

Prior to the arrival of the State Health Officer—who, it may be stated here, reached the scene as soon as possible after being acquainted with the facts—Dr. Bartlett had screened not only the small tenement building where Vitello lay sick, but had the houses contiguous thereto similarly protected against mosquitoes. After his arrival, the State Health Officer, increased the field of screening and fumigating to an area of three hundred feet square on either side of the infected house, which space was placed under a sanitary cordon for two weeks. Daily fumigations were made of all dwellings and workshops in this district and a bi-daily medical inspection also had of all persons living within the restricted territory. Water containers in West Tampa were ordered oiled and screened and material for both purposes were gratuitously furnished. The sequel to this efficient

administration, promptly commenced by Dr. Bartlett and continued and increased in scope by the State Health Officer, was seen in a suppression of yellow fever in its first case and although somewhat expensive in cost of management, yet in preventing an epidemic was an infinitesimal amount when compared to what might have been the financial loss to that section of the State had the case not been early recognized and active measures adopted before the infectible period of the mosquito had been reached. Too much credit cannot be given Dr. Bartlett for his ferreting out the case on a slight clue, in the first instance, and afterwards, for the very prompt and effective means taken to protect the public by destroying the known and only manner in which the disease can be transmitted.

On the 15th of July, a week prior to the discovery by certain Alabama physicians of yellow fever in New Orleans, a cheap rate excursion of about five hundred persons left Pensacola for Mobile and New Orleans. Composing this pleasure jaunt were large numbers of Greek and Italian fruit dealers who annually take advantage of reduced railroad rates to visit their friends in that city. The time limit of the tickets was four days and therefore the return trip had been effected by the 19th instant, two days before the press announcement of the discovery of yellow fever in New Orleans. On the 20th of July, under a confidential cipher message from the resident agent of the State Board of Health at Pensacola, the State Health Officer was informed of suspicious sickness at New Orleans which was thought to be yellow fever. This information was immediately telephoned, also in cipher, and under the seal of confidence, to the Surgeon-General of the Public Health and Marine-Hospital Service at Washington, requesting either a confirmation or denial of the reported suspicions, for it was thought that the national health authorities would be better acquainted with all facts pertaining to the sanitary conditions of New Orleans than any private individual or the health officials of other States. A kindly response was received

Introduction
of yellow fever
into Pensacola

Yellow fever
announced in
New Orleans.

to this inquiry later on, that the bureau had received information of some suspicious illness among laborers engaged in unloading fruit vessels and that Surgeon White of the Mobile Marine-Hospital had been ordered to New Orleans to investigate the reports. The press of the country announced yellow fever in New Orleans on July 22, basing the information on the statement of the three Alabama physicians who had made a personal investigation of cases of sickness on reports which had reached them from private sources. It must not be forgotten that during this period no word of warning was given by the health authorities of New Orleans to other States or to communities within the State of Louisiana and excursions were allowed to freely enter and depart from the city, although from their own published acknowledgments since made, they knew that yellow fever existed in New Orleans on the 12th of July. Had it not therefore been for the timely discovery of the disease by physicians of another State, a more general infection of adjoining States and probably of the whole of the southern Gulf States, would have occurred. From the time of the return of the New Orleans excursionists until about the middle of August, the anxiety of the local representative of the State Board of Health at Pensacola was one of intense strain and uneasiness.

Quarantine
declared
against New
Orleans.

The State Health Officer was wholly engaged at West Tampa in looking after the case of yellow fever which had been imported from New Orleans, and therefore unable to render assistance by personal presence and to share in the apprehension and responsibilities of the moment. Quarantine against New Orleans was declared on July 22 and immediately protective measures to prevent the possible introduction of the disease by infected persons, was established at Flomaton, a small town on the Alabama-Florida border, about forty miles from Pensacola, where the Louisville & Nashville Railway makes junction of trains from Montgomery and Mobile with Pensacola. The train inspection service at this point was placed under the charge of Dr. Hiram Byrd, one of the

assistants of the State Health Officer, and while courteously and kindly conducted, with considerate regard to the comfort of passengers and the facilitation of travel, yet was firmly directed to the end that no person who could not satisfactorily account for his or her whereabouts for the ten previous days, with reference to freedom from possible infection of yellow fever, was allowed to pass this inspection station and enter the State of Florida. The subject of Sanitary Train Service will be further mentioned when some interesting figures and statistics, connected with the system conducted, will be presented.

On the 6th of August, Mr. E. H. Hamn, an engineer of the steam tug *Simpson*, died in convulsions from a sickness stated in the death certificate to have been caused from rabies. Dr. Anderson alludes to this case in his report to the State Board of Health, and furnishes the following clinical data taken from notes which he transcribed at the time of his consultation visit just prior to Mr. Hamn's death:

Death of Mr.
E. H. Hamn.

Pensacola, 12:20 p. m., August 6, 1905.

"At Cherry House.

Answer to telephone call met Dr. Renshaw who stated that Judge Hamn had sent for him on Friday 4th in a. m. He was then aboard steam tug *Nellie*. Temperature 101, pulse 115; had prescribed C. C. pills and mixture nitrate potassa. Saw him on street that evening. Telephoned for 7 a. m. next day (Saturday); found him unable to swallow and having spasms of muscles of deglutition. Pulse weak. Ordered stimulants, strychnia dueros elixir, etc. Called Dr. Herron in consultation. Ordered per enema, sedatives bromides, etc., as patient entirely unable to swallow, being thrown into paroxysms at sight of liquids. During the night resorted to hypodermics of morphia, etc. A. m. Sunday: Threw up blood, bright red in color. Never any tendency to bleed by mouth, etc. Vomited matter became darker, and now while copious, contains blood, bile, etc., by nitric acid test. Urine drawn by Dr. Bryant one hour before: about 4 oz. contained albumen. Drawn now at this visit, about 3 oz. Albumen in great quantity. No icterus of skin conjunctiva, or sclerae. Spasms of muscles of throat and thorax almost continuous, patient not quiet for a moment and case portended dissolution at early hour. Temperature 103; pulse 120. Dr. Herron cor-

roborated the facts as stated by Dr. Renshaw. In conference with both doctors, I did not deem quarantine restrictions necessary, and upon asking opinions of both upon this subject they heartily agreed that such restrictions not necessary.

3:15 p. m. Dr. Bryant telephoned that Hamn has just passed away. I ordered remains to undertaker's parlors and prepared for autopsy which was held by myself and Dr. Pierrepont. Present: Drs. Blocker, Bickerstaff, Bryant, Dewberry, Herron, Renshaw and Miss Hoer (a trained nurse). Dr. Blocker keeping record. Autopsy finished at 5:25 p. m.

DR. WARREN E. ANDERSON.

A *post hoc propter hoc* consideration of the case of Mr. Hamn, after yellow fever had been declared in Pensacola, gave rise to some conjecture and surmise especially among the younger medical profession of Pensacola, based upon subsequent experience with the disease, as to whether Mr. Hamn might not have had a typical exhibition of yellow fever and whether the convulsive constrictions of his throat might not after all have been a form of uremic poisoning. At the postmortem, it is said that the contents of the stomach were found to be a dark coffee-ground liquid, having all the appearance of "black vomit." This substance was preserved and afterwards compared with black vomit found in undoubted and typical cases of yellow fever, and pronounced to have identically the same appearance. Opposing the supposition of yellow fever in this case, must be mentioned, as stated by Dr. Anderson, that Dr. White, quarantine officer at the Santa Rosa Quarantine Station, asserts positively that he treated Mr. Hamn for a virulent case of yellow fever in 1882 and also that Mr. Hamn had not been absent from Pensacola for several months, and further that none of the non-immunes, inmates of the house occupied by Mr. Hamn at the time of his death, was sick although no measures were taken to protect any one from the bite of mosquitoes which could have been infected had Mr. Hamn been fatally ill of yellow fever. The State Health Officer presents these facts as interesting data connected with the epidemic of yellow fever at Pensacola, expressing no opinion on the subject because he did not see the patient during life nor after death.

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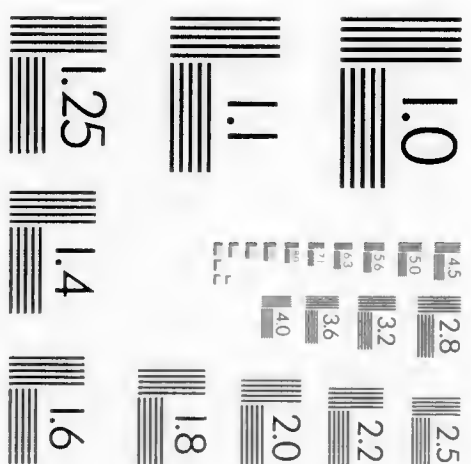
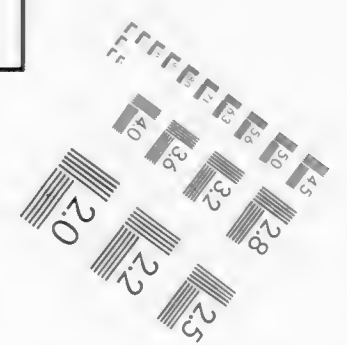
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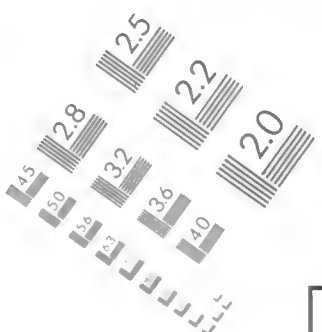
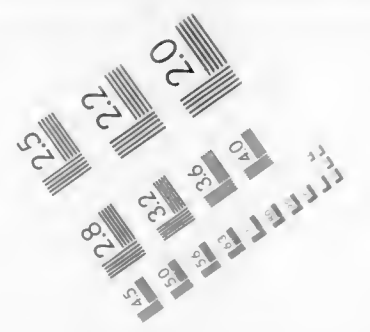
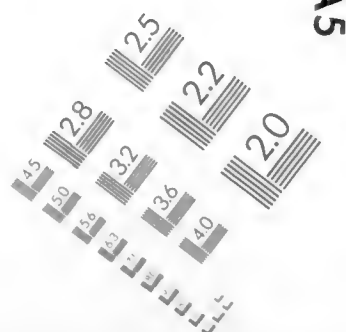


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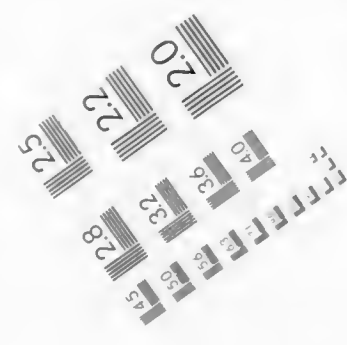
PRECISIONSM RESOLUTION TARGETS

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**REDUCTION
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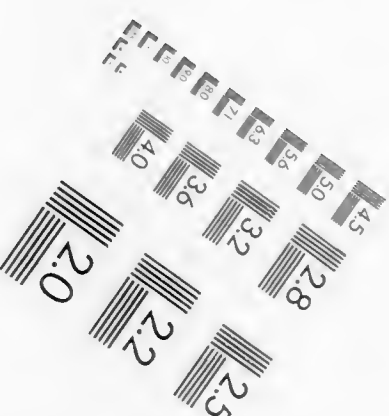
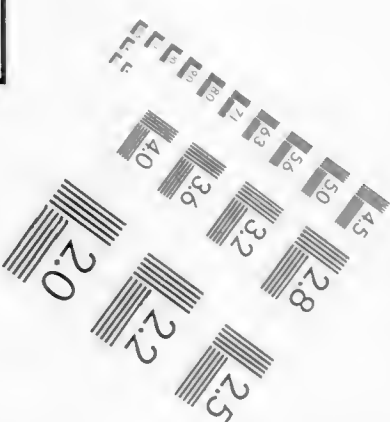
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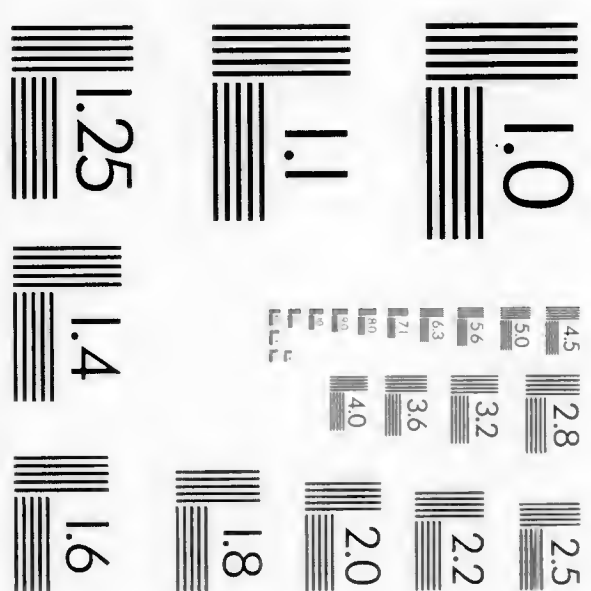
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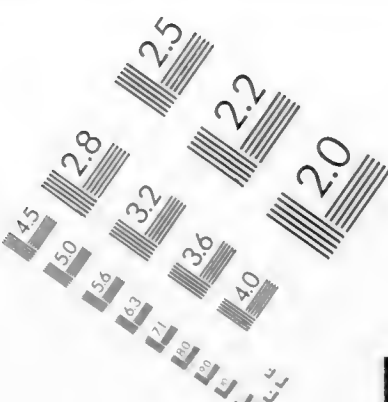
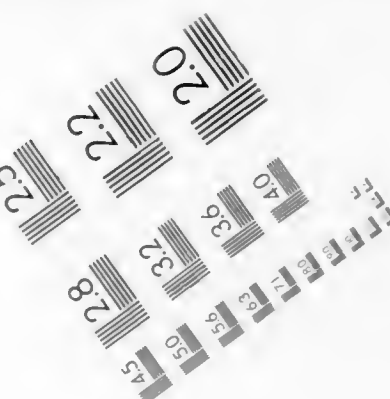
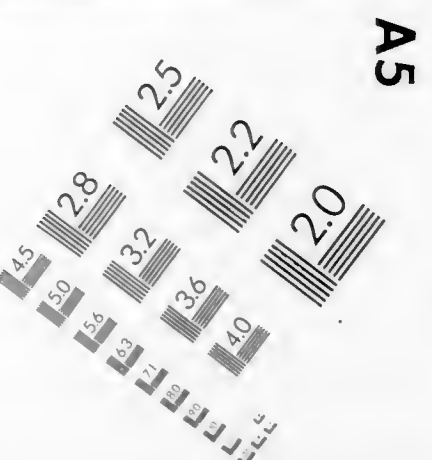
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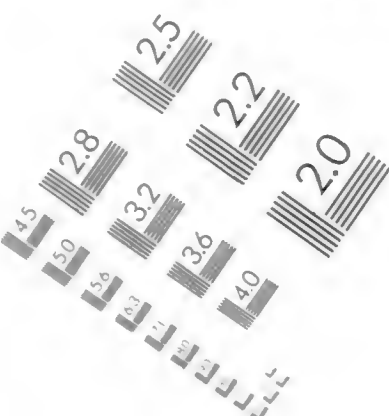
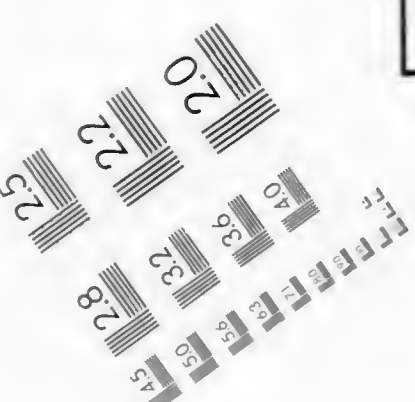
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2715 Upper Alton Road, St. Paul, MN 55119-4760
612/738-9329 FAX 612/738-1496

PRECISIONSM RESOLUTION TARGETS

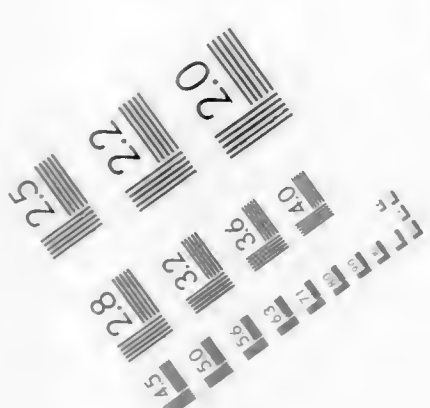


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On the 24th of August the State Health Officer received, at Jacksonville, a cipher telegram from the representative of the State Board of Health at Pensacola, desiring his presence in Pensacola on account of a death from a febrile sickness under peculiarly suspicious circumstances. Responding promptly to the call, the State Health Officer arrived in Pensacola late Friday night, August 25. The next day was spent in consultation with Dr. Anderson, the local agent of the Board, when the sickness and death of Mrs. Cressap was gone over and discussed. An illness of Mr. Cressap, the husband of the lady mentioned, was thought from symptoms submitted to be even more of a doubtful character than that of his wife, whose sickness ended in death. Mr. Cressap was up and about being practically well or convalescent, and nothing of more definite information which would determine his sickness could probably be obtained from him than what was furnished by Dr. Anderson's bedside notes. An effort was made to locate Mr. Cressap at St. Anthony's Hospital where it was said he had removed after the burial of his wife, whose funeral he attended, but on calling at the hospital it was learned that he only remained in the building one night and his whereabouts were not afterwards located until later on in the epidemic.

State Health
Officer goes to
Pensacola.

To Dr. Anderson is due the following clinical facts relating to the sickness of Mrs. Cressap:

Sickened August 14th; seen first on 19th; temperature 102 in a. m. and 101 2-5 in p. m.; pulse 68. August 20th: temperature 101 1-5 a. m., and 102 p. m.; pulse about 68. 21st.: a. m., temperature 102, and p. m. 103 3-5; pulse 70. On 22d: a. m. and p. m., temperature 103 3-5; pulse 76. On 23d: temperature 101 3-5; pulse 76. On 24th: Temperature 100; pulse 120. Patient in moribund condition. Pulse has been intermittent and weak through illness. The misleading feature in this case was the statement that she took sick on the 14th.

There can be no question of the fact, nor is it believed that any doubt is now had, as to the nature of the illness of the Cressaps, both husband and wife, and that both had attacks of yellow fever, although the source from which or through which the infection was contracted is not

Suspicious
sickness of
three Greeks.

known. As Dr. Anderson had very properly fumigated the Cressap dwelling on East Government street, no other precautionary measures were thought to be necessary, other than a tentative watchfulness of other cases of fever which might occur. No other cases of yellow fever occurred in the Cressap apartments.

On Monday afternoon, quite late in the day, Dr. Anderson informed the State Health Officer that through a friend he had been acquainted with suspicious sickness in three Greeks and that he had visited them and being greatly impressed with the gravity of the symptoms which each presented, he requested the State Health Officer also to visit these persons. This was immediately done, but an examination in a defective light of a waning day, made it difficult to determine positively at that visit whether the cases were yellow fever or not, for the patients although up and about showed marked evidence of extreme prostration.

The State Health Officer and Dr. Anderson, the resident sanitary agent of the Board, fully realized the seriousness of the proposition which they had to meet, and the responsibility resting upon them, and especially upon the State Health Officer did a decision rest with greater weight because under the Statute he is alone authorized and directed to decide questions of this character. On the one hand, to state cases of fever to be yellow fever without due and careful consideration of all phases of sickness and a thorough analysis of symptoms, examined and weighed collectively and not singly, would be an unsound procedure and might needlessly precipitate a community into useless panic and severe financial difficulties; but on the other hand, to ignore well established indications and methods which experience has shown to be unquestionable and indisputable signs and aids in arriving at a correct diagnosis of the true nature of the disease, would inevitably lead to a general epidemic prevalence with consequent loss of life and commercial disaster. Therefore, it was deemed wise and prudent to wait until the following day before a final conclusion was reached,

particularly as no harmful results could occur to the public health by this delay as the time for the infectivity of mosquitoes, the only medium of transmission of the poison, had passed some days previously, and therefore the patients themselves were harmless in contact or intercourse with their neighbors.

The next day, however, on again visiting these cases, there was no longer any room for doubt left, and an announcement was made of yellow fever in Pensacola in the following statement addressed to the general public, but not before the mayor of the city as chairman of the City Board of Health was first appraised of the unfortunate findings, and was requested to place a sanitary cordon around what was considered the infected district of the city:

Yellow fever
announced in
Pensacola.

PENSACOLA, FLORIDA, August 29, 1905.

"To the Public:

Three male Greeks, with characteristic symptoms of yellow fever, have been found in Pensacola. They were without medical attendance and their sickness was discovered by Dr. Warren E. Anderson, agent for the State Board of Health at Pensacola, through a rumor. The State Health Officer confirms the diagnosis of these cases. How these persons became infected is not known, as it is asserted by those supposed to know of their previous whereabouts that neither of them had been out of the city for two months of more. Very little can be gotten of their sick history, as they speak English poorly, and, as a race, are naturally timid and secretive, imparting very imperfectly and hesitatingly any information of their domestic history; but enough has been obtained to fix the date of their sickness on Thursday, 23d, and Friday, 24th.

Manuel Migul lives at No. 144 East Government street in a room back of his fruit shop, and the other two, Geo. Klonis and Chris. Thimoras, at a restaurant or fruit shop, corner of Intendencia and Tarragona streets. These men are now up and walking about the house, their attacks being mild but positive.

As there is ample time to destroy any stegomyia which may have bitten these patients before they became infectible to the human, an earnest effort will be made to accomplish this object, and arrangements are being perfected by which the two squares in which these two cases have been found shall be screened and fumigated. A bi-daily medical inspection of all persons living in this territory will be had, and any other cases will be cared for in screened rooms. The Louisville and Nashville railroad

and water transportation companies have been directed to sell tickets only to persons authorized by the State health authority, and no one living within one hundred (100) feet of the squares where the cases are located will be permitted to go elsewhere in the State, and the same is forbidden as a quarantine measure and restriction on travel.

The restricted territory is hereby under police guard, and is to be considered as within a sanitary cordon.

The citizens of Pensacola are earnestly requested to screen their houses, and destroy on the premises and in the home all breeding places for these insects. Use nets at nights and fumigate sleeping rooms and lounging rooms daily, that mosquitoes may be killed. Maintain a calm, conservative course, attend to business, and, permitting the health authorities of city and State to attend to theirs, thus aiding both in their effort to repeat successfully the incident of the West Tampa eradication.

To the physicians of Pensacola the State Health Officer earnestly asks that all fever cases be closely watched and studied, treating every case under a mosquito net, and fumigating with pyrethrum powder every fever room after it has been sealed, and immediately notifying the State health authorities when any doubtful symptom, not well understood, arises in the course of treatment.

With the united efforts of the people, it is hoped this incident may be soon closed.

JOSEPH Y. PORTER,
State Health Officer.

Disinfecting
and screening
corps organized.

Immediately a disinfecting and screening corps was organized by the State Health Officer, with Drs. Mallory, Kennedy, and Clinton D'Alemberte in charge, to render assistance to the City Health Board in screening and disinfecting every house within the infected area, in order that mosquitoes which had become infected from the yellow fever cases discovered within that territory, might be killed before the period of infectibility to the human would be reached, thus destroying the medium of transmission and suppressing any further spread of the disease. This sanitary cordon was maintained for three weeks, during which time houses in which cases of yellow fever occurred, which had been screened, were fumigated and refumigated, together with others in the same district, and at one time the number of cases had so materially decreased, that it was confidently thought that the

progress of the disease had been arrested and would within a few days be entirely suppressed. But cases soon thereafter began to spring up in other parts of the city and other centers of infection were found, due probably to the escape of persons who had become infected before the cordon had been placed and who escaped from the guarded territory before or possibly after the sanitary surveillance had been established. This intra-mural guard service was discontinued about the 1st of September, having failed to accomplish what had been hoped for, principally through an indifference to advice and lack of co-operative assistance from those without as well as those living within the infected district. It was believed at the time, which opinion has since been confirmed by observation gained by practical experience, that if individual help of those living within the restricted portion of the city which for a long period was certainly the only portion of the city which was infected with yellow fever, had been given, by destroying mosquitoes, that the disease would have ceased where it was first introduced by some infected person of the New Orleans excursion. Had the screening which the State health authorities placed over all apertures been permitted to remain intact and a vigorous crusade been conducted against mosquitoes in daily fumigation, by the inmates of all houses, there would probably have been only the few cases which the State health authorities as first discovered, and a general epidemic prevalence in the city would have been prevented.

The State Health Officer fully appreciated that the management of yellow fever according to the law of mosquito transmission was an acute departure from old methods of dealing with the disease and not such as the older citizens of Pensacola had been accustomed to observe, and that skepticism and unbelief in the new doctrine and new law was to be expected. Having the greatest possible sympathy with the people in the misfortune which had befallen them, which occurred through no fault, omission, nor neglect on their part to observe need-

New management of yellow fever an acute departure from old methods.

ful requirements or protective methods against New Orleans after the announcement of yellow fever in that city, the State Health Officer fully realized that a large portion of the citizenship of Pensacola could not understand, nor did they stop to reason and think, why restrictive measures on travel from the city or movement within the city should be imposed upon them. Every effort was therefore made to lighten this interference with the people in transacting their daily business as much as possible so there might not be that feeling of supervision so distasteful to the citizens in domestic life, and that there should likewise only be an intervention with trade, when it was considered that the health of the community might suffer or the rest of the State be menaced by an unrestrained travel and intercourse. There is no doubt but that the intelligent and fair-minded people of Pensacola felt and appreciated the responsibility which rested on the State Health Officer and did credit him with a conscientious discharge of a duty which was imposed on him by the State statute. For the rest of the State held him to a strict accountability for measures of quarantine and restricted travel which were considered absolutely necessary to protect outside communities from fever introduction, and were apparently willingly disposed to bear magnanimously a temporary discomfort that the State as a commonwealth might not be injured. It was expected that as time advanced and the efficacy of the new management was apparent in lessening the number of cases over what had formerly occurred in other epidemics at Pensacola, and that attacks were averted by avoiding the bite of any and all mosquitoes, a greater confidence in the new method of treatment would be established. Such was the case for fully seventy-five per cent. of the citizens of Pensacola gave co-operative assistance by either speech or action and in many instances by both methods, to the health authorities of both State and city, which help it is quite certain greatly aided in suppressing the epidemic before the appearance of frost.

The tactics of opposition to the State Health Officer, resorted to by a few of the citizens of Pensacola, of a class who are usually adverse to all advanced ideas, and who had been antagonistic to the State Board of Health since the organization of the Board in 1888, by obstructive and abusive criticisms, would not here be noticed or alluded to, except that it is thought such petty indulgences have been given undue prominence and weight by the press outside of Pensacola, when it could not be expected to understand the peculiar conditions of the situation. It is true that the State Health Officer received threatening letters and that street corner diagnosticians and curbstone sanitarians did not quite agree with him in his methods of management of the epidemic, probably because they thought that their opportunities and experience in these difficulties had been greater(?) than his. But aside from a tiresomeness which a constant daily nagging of this character always causes, there were numerous humorous occurrences, in injunctions, and other court scenes, which rather gave zest and spirit to the occasion and afforded some amusement and entertainment by relieving a rather monotonous management.

On the 8th of September, the number of cases of fever had so increased and were so scattered throughout the city, that it was thought necessary in order to protect the other portions of the State and to prevent the fever from spreading to nearby settlements, to somewhat restrain travel to and from Pensacola. Up to this time all restrictions had been confined entirely to the intracivic cordon and those who were not held within that area were permitted to enter and leave the city for nearby country places and settlements. To provide for a better surveillance of those who were camping on the bay-shore or living for the summer within a reasonable distance from the city, and coming daily to the city for business or traffic purpose, the pass system was instituted and a sanitary cordon was thrown around the city under the control of the sheriff of Escambia county, who was called upon by the State Health Officer under the pro-

Opposition to
the State
Health Officer.

Number cases
yellow fever in
Pensacola in-
crease.

Quarantine
increased.

vision of law, to provide this means of intra-state sanitary protection against Pensacola. Later on, when it was found necessary to increase the quarantine, all passes were withdrawn and only known immune persons were allowed to go out and in the cordon line. A relay camp for the train service between Pensacola and River Junction was established at Escambia station, about eight miles from Pensacola, where crews of both the outgoing and incoming trains were exchanged and only under special permit were travelers or repair crews allowed out or into Pensacola until the close of the epidemic on the 12th day of November.

Surgeon-General of P. H. & M. H. Service requested to aid in preventing a spread by water.

About this time a request was made of the Surgeon-General of the Public Health and Marine-Hospital Service to aid the State health authorities in preventing a spread by water of yellow fever from Pensacola to other parts of Florida. This request was promptly met and responded to, and the hire of a naphtha launch was authorized to patrol the harbor of Pensacola and contiguous waters of the bay and sound, by day and night. Later on this service was increased by the detail of the revenue cutter "Penrose" under the command of Lieut. Alexander; with the revenue cutter "Hamilton" under the command of Captain Hanks for the outer coast patrol duty. The co-operation and assistance rendered the State by the Government service, at this juncture, was of a character such as the State Board of Health without great expense, could not have given, and was therefore the more appreciated. At the close of operations at Pensacola the thanks of the Board were presented to the Honorable Secretary of the Treasury and the Surgeon-General of the Public Health and Marine-Hospital Service for the signal benefit given to the State in the assistance thus rendered. Likewise, is the State Board of Health indebted to the Public Health and Marine-Hospital Service for establishing a detention camp forty miles from Pensacola, near to the Alabama line, where persons desiring to leave Pensacola might pass the required period of observation which was demanded before being

allowed to enter other States or communities within the State of Florida. The State health authorities at Pensacola exercised great care in permitting persons to leave Pensacola for this camp, thus safeguarding the camp from possible infection, by giving this permission to none who showed a temperature above normal.

The various bulletins announcing quarantine regulations, directing management, or advising the public, which were published at Pensacola during the prevalence of yellow fever, are given elsewhere in the appendix to this report, and may be pleasing reading to those who are especially interested in the general sanitary management of the Board at this time. Bulletins.

From this period of the epidemic to its final termination on November 19, when all quarantines against Pensacola were removed, the course of action of the State Health Officer was directed principally toward destroying infected mosquitoes in houses where cases were reported from, and all breeding places of these insects in and about premises and elsewhere in the city. The State Board of Health maintained, at the sole expense of the State, a fumigating corps of from 100 to 120 men with two special medical assistants in charge: Drs. Kennedy and D'Alemberte. This corps was divided into squads of 5 men, under a foreman, and every effort was made to fumigate all houses where cases were reported as soon as the safety of the patient therein would permit a removal to another room, that the sick room might be at once screened and fumigated to kill imprisoned mosquitoes and those probably infected. Where time permitted, other rooms in the same house were screened and always fumigated and the inmates warned against removing screens and cautioned to be careful in entering and leaving the premises through the screened openings. Later on, in the course of the epidemic, this corps was doubled in number of employees and facilities for a rapid fumigation of every house where yellow fever had occurred, together with all dwellings within three hundred feet of any infected premises. This effort to retard Fumigating corps.

the spread of yellow fever and to destroy infected mosquitoes was done under the authority of the city ordinances, although the work was performed by the State Board of Health and paid for out of the Board's treasury, and terminated the epidemic before the appearance of any markedly cold weather.

St. Anthony's
Hospital.

A pleasing feature of the control of the epidemic at Pensacola was the professional assistance which was given to the indigent, sick of yellow fever. The board of managers of St. Anthony's Hospital kindly consented to admit for treatment the homeless and the friendless and the State Health Officer gave his professional services in treatment and management of the hospital. A large ward with a smaller room nearby, connected by a corridor, were wire screened. Besides having screened wire doors at either end of a short hall, a frame wire screened vestibule was built projecting into the larger ward, the doors of which were so constructed, that each opened in the opposite direction having a wire screened cage between; thus it was well nigh impossible for mosquitoes to effect entrance. There were twenty patients treated in this ward and other screened rooms at St. Anthony's, who were nursed by non-immune female nurses. None of the nurses contracted yellow fever although many virulent cases were admitted in different stages of the disease, neither did any of the attaches or employees of the hospital have the disease. Several persons were sent to the hospital with a "fever" without waiting to determine the exact character of the sickness, whose cases afterward turned out to be malaria, the malarial parasite being found in great numbers in their blood. These patients were treated along side of those who had severe cases of yellow fever—for it seemed always to so happen that only the desperately ill found their way to the institution and recovered from the malarial attack without contracting yellow fever. No more convincing argument of the efficacy of management according to the law of transmission of yellow fever by the mosquito could have been offered, than was demon-

Law of trans-
mission of yel-
low fever by
the mosquito
demonstrated.

strated with such success at St. Anthony's Hospital this past summer, and no greater proof is needed to sustain the correctness of that law than the facts which were established under daily observance. Another incident of this same character, bearing upon the exclusion of the infected mosquito and a certain immunity to the disease when due precautions are taken in screening dwelling and beds, was noticeable in the family of one of the inspectors of the State Board of Health. He lived with his family in the heart of the infected district and within a few feet of yellow fever infected houses which were almost at touching distance on either side of him. He and his wife were immune to the disease but his children were not. At the commencement of the epidemic he took the caution to screen thoroughly his house and to make frequent fumigations. His children who were kept within doors were not therefore bitten by infected mosquitoes and did not contract yellow fever. Other instances of similar nature could be given but it is not thought necessary to prolong the discussion of a subject or a question which needs no defense, the correctness of which has so often been confirmed.

As there was some doubt expressed by a few of the medical profession at Pensacola that the disease under observation at the commencement of the epidemic was not yellow fever, but malarial in character, the State Health Officer endeavored to interest those who were thus skeptical to avail themselves of the Laboratory of the Board at Jacksonville and to send blood smears of their patients with "fever," for microscopic examination and determination, even by the process of exclusion. A few took advantage of this offer and had a satisfaction in clearing up many doubtful cases of diagnosis. Realizing that the profession as a whole was hard worked and had not the time for a thorough scientific study of the prevailing sickness, the State Health Officer brought the State's bacteriologist, Dr. Edward Andrade, from Jacksonville, with necessary laboratory appliances, that prompt assistance might be given in blood examination,

Doubts
expressed as
to yellow
fever.

State Bacteri-
ologist moves
to Pensacola.

and that a systematic and scientific study of the epidemic might be made from a daily and frequent observation of cases in the hospital. Drs. Kennedy and D'Alemberte very kindly placed their clinical laboratory at the command of Dr. Andrade, and for several weeks Dr. Andrade gave his entire time to this work. The expense of this co-operative assistance to the profession was entirely borne by the State Board of Health.

There never was an effort made or desire expressed by the State Health Officer to supersede the City Health Board of Pensacola in the sanitary management of the affairs of that city; on the contrary it was his constant aim and purpose to anticipate the needs and necessities of the occasion, which an extended experience in the management of like exigencies had taught him were to be expected and required, and to offer such financial assistance from the State Board of Health as the State statutes permitted or the president of the Board might authorize. The authority of the State through the State Board of Health was never interposed nor insisted upon unless absolutely needed to protect the other portions of the State from invasion from yellow fever. All violations of the city's sanitary regulations were prosecuted under the city ordinances and were instituted by the city health officer or the chairman of the city health board. Therefore, harsh criticisms indulged in against the State Health Officer in ascribing to him improper motives, intentions or discriminations of administration of the intra-State quarantine regulations were not only unkind in tone but unjust and untrue in fact.

Efficiency of
management.

The proof of efficiency of management of any business or organization is seen in the results obtained, and it can therefore be pointed out with much pride and gratification and without boast or brag that the sanitary control of the epidemic at Pensacola by the State health authorities was so satisfactorily directed that the State outside the confines of the city of Pensacola suffered no infection nor were the commercial and business interests of the State materially hurt, certainly not interfered

with, for outside of a radius of ten miles of Pensacola, there were no quarantine restrictions imposed upon travelers nor was the freedom of movement of the citizen in the least interfered with by the State Board of Health. It is true that some places in the State, principally along the line of railroad running east from Pensacola, on the excitement of the moment, attempted to impose quarantine restrictions on passengers, and assume a surveillance over travel which was unwarranted and unnecessary besides being prohibited by law. The different municipalities contiguous to Pensacola should never have thought that because the State Health Officer did not separately and individually inform them of the protective measures adopted and enforced by him to confine the infection to Pensacola and to hinder a spread of yellow fever to other points in the State, that he was unmindful of their safety or indifferent to the health of the citizens in nearby towns and settlements. Every measure instituted to prohibit a possible spread of yellow fever from Pensacola was given due publicity in the daily press and by posted bulletins; hence, it is to be regretted that in a few places an unreasonable fright was permitted to take the place of intelligent thought, and travel and business was for a time needlessly interfered with. A hydra-headed sanitary management in times of epidemic prevalence must necessarily result in chaotic disorder and confusion to the people, as was noticed in neighboring States where county surveillance of travel was permitted to displace State control. It is a maxim of business that no organization or institution can attain success without a competent and responsible head to whose ability for executive management, full confidence must be given by the other members of the firm or corporation. Neither is it good business judgment to discredit the management of a business because each and every member composing the organization does not understand the motives underlying certain acts of the manager.

It is not supposed that individuals having no special

training in particular lines of trade or investment will be acquainted with market values or the demands of commerce, and therefore, trust, confidence and faith in the integrity of those selected as a board of directors for a particular work, is essential to the successful accomplishment of any project or scheme.

Apply this reasoning to health management and it is plain that if the horrors of 1888, with its many county quarantines, hold-ups of travelers, silly and illogical detention of commodities with consequent loss, and great commercial disaster to the State at large, would be avoided in the future, the people must willingly yield a prompt and ready confidence to State authority, not only in times of epidemic prevalence, but whenever advice is offered for improving or protecting the public health. These are facts which are recognized as patent to those living in other States, and have oftentimes been remarked upon, that under the fostering care of the State Board of Health, the health of the people of Florida has been less disturbed by contagious diseases than in other Southern States, and through a health reputation thus gained, a wonderful immigration has been acquired by the State with a marvelous increase in commercial values. From 1888 to the present year—seventeen years, which is the life of the State Board of Health of Florida—the population of Florida has increased from 367,036 to 604,967, having almost practically doubled in the seventeen years, and the estimated wealth has likewise increased from \$70,616,331.00 in 1888, to \$131,436,593.00 in 1905, which has also nearly doubled. After the establishment of the State Board of Health, early in 1889, capitalists and home-seekers were attracted to the State of Florida, and waste places built up and railroads constructed such as had never before been conceived or thought of. Governor Fleming was far-sighted when he insisted upon a State health organization for he appreciated the benefits which such a sanitary supervision would bring to the State. Is it too much to suppose or to assert that none of this Alladin-like development of the State would have taken

Wonderful
growth of
Florida since
1888.

place, certainly not as soon as it did, had not investors from other States, where the public health is esteemed above all other considerations, and is carefully looked after, felt assured that Florida in 1889 had made a move in the right direction in enacting a broad, intelligent and efficient health law and placing the execution of regulations and methods for preserving the health of the citizens of the State beyond the reach or influence of politics, either general or local? Thus it appears with convincing reasoning that the State Board of Health of Florida has been an important factor in acquiring a citizenship for the State which by wealth and intelligence, has brought energy and vigor to the commonwealth in multiplying the products of the soil and unfolding sources of riches from the depths of the earth which have laid hidden and unknown for centuries.

The number of cases of yellow fever which were reported to the health authorities in Pensacola during 1905, is given in the official bulletins as 572, with 82 deaths, the last case occurring in December and unfortunately terminating fatally on December 4. This number, however, does not accurately represent the total of cases; although the number of deaths is thought to be correctly stated. It is estimated by Dr. Anderson, the Board's able representative at Pensacola, that about twenty per cent. of the cases of which official record is had, should be added to the present list, and that with this addition a more correct morbidity from this disease would be had. There is no doubt but there were many mild cases of yellow fever in Pensacola which probably were not either recognized as such or which had no medical attendant, thus escaped being reported, and likewise others, the mention of which was purposely withheld. If the supposition of Dr. Anderson is correct, then the number of cases would approximate 685, which with a fatality of 82, would give a death rate of the disease of 11.9 or a death rate according to population of 3.28 per 1,000. With the exception of the Italian at West Tampa who came directly from an infected house in New

State Board of
Health an im-
portant factor
in the develop-
ment of Flori-
da.

Orleans, there were no other cases of yellow fever in Florida without the limits of Pensacola.

Mention has been made of a train inspection service under the direct supervision of a medical officer, at different points along the western and northern border of the State, where rail, water, or other usually traveled routes entered from other States. This inspection service was adopted so that all persons who could not give satisfactory statements of personal whereabouts for ten previous days with especial reference to absence for that period from any possibly infected yellow fever locality, might be detained or prevented entrance into the State. The first of these stations to be established, was at Flomaton, a small railroad junction town on the Florida-Alabama State line, under the control of Dr. Hiram Byrd, assistant to the State Health Officer. Dr. Byrd in his report for the year outlines very interestingly the methods followed under the direction of the State Health Officer in determining the safety of travel from other States. Following the border line of Florida eastward from Flomaton, these train inspector stations were located at Crestview under Dr. Frank Maura as special assistant, with an assistant; at River Junction (Chattahoochee River) under Dr. B. F. Barnes, as special assistant, with two assistants; at Monticello, under Dr. A. B. Harrison, as special assistant, who was required to inspect trains from Thomasville, Georgia, entering Florida, with one assistant; at Madison, under Dr. L. C. Ruter, as special assistant, with one assistant; at Greenville, under Dr. R. N. Green, as special assistant, with one assistant; at Jasper, under Dr. R. F. Godard, one of the regular assistants to the State Health Department, with one assistant at first and a portion of the time when travel was heavy, two lay-assistants to help him; at Crawford, under Dr. H. A. Mills, as special assistant; at Yulee first and afterwards at Evergreen to which the inspection camp was removed, at the request of the Fernandina citizens, under Dr. W. T. Elmore, as special assistant, with two assistants and camp equipment; at

Folkston, Georgia, afterwards¹ moved across the line to Camp Perry, under Dr. E. W. Diggett, one of the regular assistants of the State Health service. It will be therefore seen that at each of the points where an inspection of passengers was had, the station was under the direct supervision and management of a medical officer, who, when the necessities of travel demanded, were given competent lay assistants. The object acquired by having medical officers in charge of this work, was that of a careful thorough and efficient inspection was had of every person attempting to enter the State, and thereby undesirable travelers who could not satisfactorily account for their previous ten days whereabouts, were rejected and turned back, thus lessening the possibility of yellow fever gaining entrance into the State through an infected person in whom the disease had not yet developed. The mayor of Folkston, Georgia, objecting to a train inspection service being held at that town, permission was obtained from General Wyman to use Camp Perry for that purpose. Camp Perry is beautifully located on a high bluff overlooking the St Mary's river, which is the dividing line between Florida and Georgia, well shaded and having wholesome water. It is a camp location of historical note, having been the detention camp for observation of refugees from Jacksonville in the epidemic year of 1888. At that time canvas equipage was used and the camp was under military rule. Since then the government has acquired a long lease on the ground, permanent wooden buildings have been erected and a complete camp outfit for several hundred persons is stored there under the care of a resident custodian, and is always available and ready to be transferred to other points at almost a minute's notice. It was from Camp Perry that the tentage and other supplies for Camp Murray—the Pensacola detention camp of last year—was sent and which was so helpful to the people of Pensacola.

According to statistical tables of train inspection service given hereafter, it is seen that the principal work

Camp Perry.

in this direction, with the largest number of passenger inspections, was had at Camp Perry, Flomaton, Jasper and Evergreen, near Yulee, although every point where these safeguards to the public health were placed, was carefully attended to and watched. The service was an extremely disagreeable one as the inspectors all state in their reports when speaking on this subject. They were subjected to abuse, captious criticisms of their methods, persistent efforts made quite often to evade requirements, and on more than one occasion an unwarrantable interference from passengers, who having provided themselves with necessary identification papers, sought to interpose their individuality in behalf of those of whom they knew nothing and who were without identification of previous whereabouts. There can be no doubt but that these inspectors had their patience and temper many times sorely tried, but although firm and unswerving in enforcing a compliance with the regulations governing travel into the State, they were polite and kind to all passengers. Every assistance was rendered to prove proper identification and freedom from infection, and every consideration was shown passengers. Instructions had been issued at the establishment of the service, to discredit as a rule all so-called health certificates, and to only pass persons into the State on proper identification of ten days previous whereabouts and absence from a yellow fever infected locality. This identification could be established by letters, with post office stamp, expense books, orders for travel, or dated and receipted hotel bills or other receipts for money paid.

The following statistical tables, noted below, are interesting as showing the extent of the work performed in this especial line of yellow fever exclusion. The blank forms for daily reports are likewise given and which indicate the very thoroughness of the service, in detail administration. These reports were mailed every night at the day's work, to the State Health Officer at Pensacola, and it was possible then for him to know besides where every passenger came from, those who had been

Statistical
tables.

passed into the State that date, his or her name, and destination. The movement of every such individual in and through the State could have been traced should it have been necessary to do so, by the assistance of the police officers of the larger municipalities or the county officers of smaller districts.

REPORT OF TRAIN INSPECTION.

Grand Total of Inspection from August 1st to November 12th, 1905.

Number	passenger trains inspected.....	2105
"	passengers inspected.....	53164
"	freight trains inspected.....	769
"	freight crews inspected.....	772
"	passengers admitted.....	45527
"	passengers detained awaiting evidence.....	1076
"	passengers rejected.....	630
"	sick passengers or freight crews.....	2
"	passengers from Southern States.....	40571
"	passengers from Northern States.....	8307

Report of Train Inspection, River Junction, Florida.

Dr. B. F. Barnes in Charge.

AUGUST.

Number	passenger trains and boats inspected.....	79
"	passengers inspected.....	985
"	passengers rejected.....	20

SEPTEMBER.

Number	passenger trains and boats inspected.....	103
"	passengers inspected.....	1331
"	passengers rejected.....	36

OCTOBER.

Number	passenger trains and boats inspected.....	114
"	passengers inspected.....	1398
"	passengers rejected.....	75

NOVEMBER.

Number	passenger trains and boats inspected.....	42
"	passengers inspected.....	478
"	passengers rejected.....	16

TOTAL FOR FOUR MONTHS.

Number	passenger trains and boats inspected.....	341
"	passengers inspected.....	4192
"	passengers rejected.....	147
Quarantine lifted on November 12th, 1905.		

Camp Perry, Florida.

Dr. E. W. Diggett, in Charge.

AUGUST.

Number	passenger trains inspected.....	36
"	passengers inspected.....	1185
"	passengers admitted.....	1161
"	passengers detained awaiting evidence.....	22
"	passengers rejected.....	2
"	passengers from Southern States.....	987
"	passengers from Northern States.....	198

SEPTEMBER.

Number	passenger trains inspected.....	188
"	passengers inspected.....	6446
"	freight trains inspected.....	3
"	freight crews inspected.....	6
"	passengers admitted.....	6370
"	passengers detained awaiting evidence.....	74
"	passengers rejected.....	2
"	passengers from Southern States.....	5139
"	passengers from Northern States.....	1295

OCTOBER.

Number	passenger trains inspected.....	195
"	passengers inspected.....	7051
"	passengers admitted.....	6937
"	passengers detained awaiting evidence.....	124
"	passengers rejected.....	1
"	passengers from Southern States.....	5031
"	passengers from Northern States.....	2000

NOVEMBER.

Number	passenger trains inspected.....	84
"	passengers inspected.....	4142
"	passengers admitted.....	4110
"	passengers detained awaiting evidence.....	32
"	passengers from Southern States.....	2142
"	passengers from Northern States.....	2000

TOTAL FOR FOUR MONTHS.

Number	passenger trains inspected.....	503
"	passengers inspected.....	18824
"	freight trains inspected.....	3
"	freight crews inspected.....	18578
"	passengers detained awaiting evidence.....	252
"	passengers rejected.....	5
"	passengers from Southern States.....	13299
"	passengers from Northern States.....	5493

Greenville, Florida.

Dr. Ralph N. Greene, in Charge.

AUGUST.

Number	passenger trains inspected.....	17
"	passengers inspected.....	418
"	passengers admitted.....	418
"	passengers from Southern States.....	407
"	passengers from Northern States.....	11

SEPTEMBER.

Number	passenger trains inspected.....	54
"	passengers inspected.....	465
"	passengers admitted.....	450
"	passengers rejected.....	11
"	passengers from Southern States.....	465

OCTOBER.

Number	passenger trains inspected.....	57
"	passengers inspected.....	633
"	passengers admitted.....	624
"	passengers rejected.....	13
"	passengers from Southern States.....	624
"	passengers from Northern States.....	9

NOVEMBER.

Number	passenger trains inspected.....	13
"	passengers inspected.....	173
"	freight trains inspected.....	2
"	freight crews inspected.....	2
"	passengers admitted.....	169
"	passengers rejected.....	4
"	passengers from Southern States.....	163
"	passengers from Northern States.....	9

TOTAL FOR FOUR MONTHS.

Number	passenger trains inspected.....	55
"	passengers inspected.....	1789
"	freight trains inspected.....	2
"	freight crews inspected.....	2
"	passengers admitted.....	1661
"	passengers rejected.....	28
"	passengers from Southern States.....	1649
"	passengers from Northern States.....	28

Quarantine lifted on November 12th, 1905.

Madison, Florida.

Dr. L. C. Ruter, in Charge.

AUGUST.

Number	passenger trains inspected.....	17
"	passengers inspected.....	149
"	passengers admitted.....	143
"	passengers detained awaiting evidence.....	2
"	passengers rejected.....	4
"	passengers from Southern States.....	141
"	passengers from Northern States.....	7

SEPTEMBER.

Number	passenger trains inspected.....	54
"	passengers inspected.....	518
"	passengers admitted.....	513
"	passengers detained awaiting evidence.....	1
"	passengers rejected.....	4
"	passengers from Southern States.....	512
"	passengers from Northern States.....	4

OCTOBER.

"	passengers rejected.....	2
"	passengers inspected.....	554
"	passengers admitted.....	553

Number	passengers detained awaiting evidence.....	7
"	passengers rejected.....	7
"	passengers from Southern States.....	531
"	passengers from Northern States.....	1

NOVEMBER.

Number	passenger trains inspected.....	25
"	passengers inspected.....	273
"	passengers admitted.....	259
"	passengers detained awaiting evidence.....	10
"	passengers rejected.....	2
"	passengers from Southern States.....	271

TOTAL FOR FOUR MONTHS.

Number	passenger trains inspected.....	151
"	passengers inspected.....	1494
"	passengers admitted.....	1448
"	passengers detained awaiting evidence.....	20
"	passengers rejected.....	14
"	passengers from Southern States.....	1455
"	passengers from Northern States.....	12

Jasper, Florida.

Dr. R. F. Godard, in Charge.

AUGUST.

Number	passenger trains inspected.....	30
"	passengers inspected.....	973
"	freight trains inspected.....	44
"	freight crews inspected.....	44
"	passengers admitted.....	923
"	passengers detained awaiting evidence.....	40
"	passengers rejected.....	22
"	sick passengers or freight crews.....	1
"	passengers from Southern States.....	967
"	passengers from Northern States.....	6

SEPTEMBER.

Number	passenger trains inspected.....	90
"	passengers inspected.....	2541
"	freight trains inspected.....	130
"	passengers admitted.....	2399
"	passengers detained awaiting evidence.....	140
"	passengers rejected.....	110
"	passengers from Southern States.....	2609
"	passengers from Northern States.....	21

OCTOBER.

Number	passenger trains inspected.....	84
"	passengers inspected.....	2602
"	freight trains inspected.....	117
"	freight crews inspected.....	117
"	passengers admitted.....	2250
"	passengers detained awaiting evidence.....	345
"	passengers rejected.....	8
"	passengers from Southern States.....	2571
"	passengers from Northern States.....	29

NOVEMBER.

Number	passenger trains inspected.....	33
"	passengers inspected.....	1158
"	freight trains inspected.....	58
"	freight crews inspected.....	58
"	passengers admitted.....	1029
"	passengers detained awaiting evidence.....	129
"	passengers from Southern States.....	1144
"	passengers from Northern States.....	14

TOTAL FOR FOUR MONTHS.

Number	passenger trains inspected.....	237
"	passengers inspected.....	7274
"	freight trains inspected.....	349
"	freight crews inspected.....	349
"	passengers admitted.....	6601
"	passengers detained awaiting evidence.....	654
"	passengers rejected.....	140
"	sick passengers or freight crews.....	1
"	passengers from Southern States.....	7291
"	passengers from Northern States.....	70

Monticello, Florida.

Dr. A. B. Harrison, in Charge.

AUGUST.

Number	passenger trains inspected.....	20
"	passengers inspected.....	271
"	passengers admitted.....	157
"	passengers detained awaiting evidence.....	1
"	passengers rejected.....	3
"	passengers from Southern States.....	263
"	passengers from Northern States.....	8

SEPTEMBER.

Number	passenger trains inspected.....	58
"	passengers inspected.....	886
"	passengers admitted.....	467
"	passengers detained awaiting evidence.....	1
"	passengers rejected.....	28
"	passengers from Southern States.....	868
"	passengers from Northern States.....	9

OCTOBER.

Number	passenger trains inspected.....	60
"	passengers inspected.....	896
"	passengers admitted.....	603
"	passengers detained awaiting evidence.....	5
"	passengers rejected.....	15
"	passengers from Southern States.....	888
"	passengers from Northern States.....	8

NOVEMBER.

Number	passenger trains inspected.....	24
"	passengers inspected.....	384
"	freight trains inspected.....	2
"	freight crews inspected.....	2
"	passengers admitted.....	226
"	passengers detained awaiting evidence.....	5
"	passengers rejected.....	8
"	passengers from Southern States.....	373
"	passengers from Northern States.....	11

TOTAL FOR FOUR MONTHS.

Number	passenger trains inspected.....	162
"	passengers inspected.....	2437
"	freight trains inspected.....	2
"	freight crews inspected.....	2
"	passengers admitted.....	1453
"	passengers detained awaiting evidence.....	10
"	passengers rejected.....	54
"	passengers from Southern States.....	2392
"	passengers from Northern States.....	36

Crawford, Florida.

Dr. H. A. Mills, in Charge.

AUGUST.

Number	passenger trains inspected.....	20
"	passengers inspected.....	481
"	freight trains inspected.....	12
"	freight crews inspected.....	12
"	passengers admitted.....	473
"	passengers detained awaiting evidence.....	8
"	passengers rejected.....	2
"	passengers from Southern States.....	405
"	passengers from Northern States.....	16

SEPTEMBER.

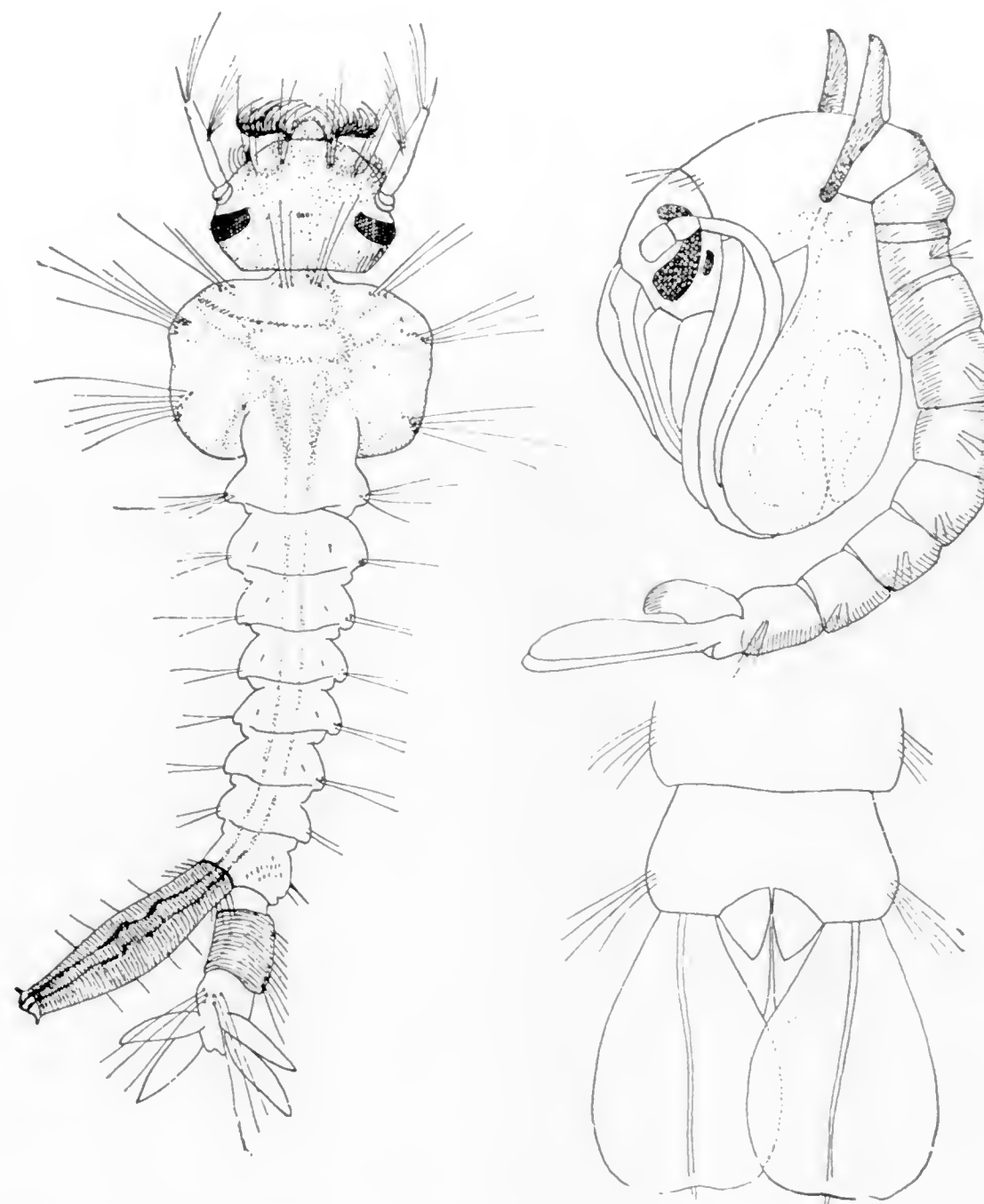
Number	passenger trains inspected.....	61
"	passengers inspected.....	1368
"	freight trains inspected.....	39
"	freight crews inspected.....	39
"	passengers admitted.....	1329
"	passengers detained awaiting evidence.....	6
"	passengers rejected.....	36
"	passengers from Southern States.....	1310
"	passengers from Northern States.....	57

OCTOBER.

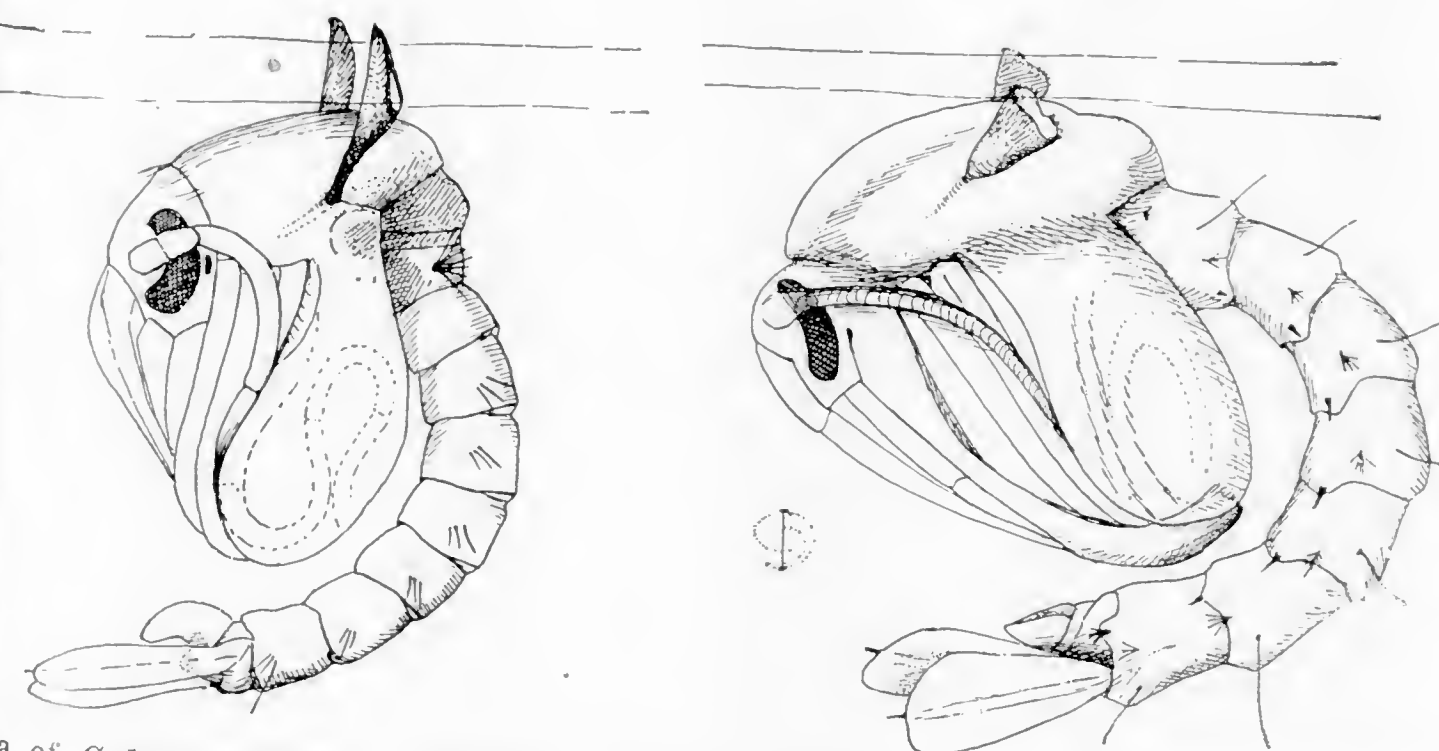
Number	passenger trains inspected.....	63
"	passengers inspected.....	1471
"	freight trains inspected.....	39
"	freight crews inspected.....	39
"	passengers admitted.....	1461
"	passengers detained awaiting evidence.....	2
"	passengers rejected.....	8
"	passengers from Southern States.....	1405
"	passengers from Northern States.....	66

NOVEMBER.

Number	passenger trains inspected.....	24
"	passengers inspected.....	549
"	freight trains inspected.....	16
"	freight crews inspected.....	16
"	passengers admitted.....	546
"	passengers rejected.....	3
"	passengers from Southern States.....	503
"	passengers from Northern States.....	46



Culex pungens. (Full grown larva at left; Pupa at right.
Greatly enlarged.)



Pupa of *Culex pungens*. (Greatly enlarged.) Pupa of *Anopheles quadrimaculatus*.

TOTAL FOR FOUR MONTHS.

Number	passenger trains inspected.....	168
"	passengers inspected.....	3669
"	freight trains inspected.....	106
"	freight crews inspected.....	106
"	passengers admitted.....	3809
"	passengers detained awaiting evidence.....	16
"	passengers rejected.....	59
"	passengers from Southern States.....	3683
"	passengers from Northern States.....	185

Yulee, Florida.

Dr. W. T. Elmore, in Charge.

AUGUST.

Number	passenger trains inspected.....	62
"	passengers inspected.....	1260
"	freight trains inspected.....	62
"	freight crews inspected.....	62
"	passengers admitted.....	1211
"	passengers detained awaiting evidence.....	16
"	passengers rejected.....	33
"	passengers from Southern States.....	1031
"	passengers from Northern States.....	229
Quarantine at Yulee August 3d, to August 20th, 1905.		

Evergreen, Florida.

AUGUST.

Number	passenger trains inspected.....	22
"	passengers inspected.....	1041
"	freight trains inspected.....	20
"	freight crews inspected.....	20
"	passengers admitted.....	1011
"	passengers detained awaiting evidence.....	5
"	passengers rejected.....	24
"	sick passengers or freight crews.....	1
"	passengers from Southern States.....	872
"	passengers from Northern States.....	169

SEPTEMBER.

Number	passenger trains inspected.....	60
"	passengers inspected.....	2955
"	freight trains inspected.....	55
"	freight crews inspected.....	55
"	passengers admitted.....	2917
"	passengers rejected.....	38
"	passengers from Southern States.....	2357
"	passengers from Northern States.....	598

OCTOBER.

Number	passenger trains inspected.....	62
"	passengers inspected.....	3418
"	freight trains inspected.....	57
"	freight crews inspected.....	57
"	passengers admitted.....	3385
"	passengers rejected.....	33
"	passengers from Southern States.....	2732
"	passengers from Northern States.....	686

NOVEMBER.

Number	passenger trains inspected.....	26
"	passengers inspected.....	1759
"	freight trains inspected.....	25
"	freight crews inspected.....	25
"	passengers admitted.....	1740
"	passengers rejected.....	19
"	passengers from Southern States.....	1145
"	passengers from Northern States.....	614
	Quarantine restrictions raised November 12, 1905.	

passengers from Northern States.....
Quarantine restrictions raised November 12, 1905.

TOTAL FOR FOUR MONTHS.

Number	passenger trains inspected.....	232
"	passengers inspected.....	10433
"	freight trains inspected.....	219
"	freight crews inspected.....	219
"	passengers admitted.....	9264
"	passengers detained awaiting evidence.....	21
"	passengers rejected.....	147
"	sick passengers or freight crews.....	1
"	passengers from Southern States.....	8137
"	passengers from Northern States.....	2296

A blank form was devised for train inspection reports, to be filled in by inspectors and kept as records of inspection, as follows:

Train No.... From..... To.....
Conductor..... Date.....190..

[illegible]

To accompany the above was a smaller blank to show each day's report:

DAILY REPORT—TRAIN INSPECTION.

Number	passenger trains inspected.....	190..
"	passengers inspected.....	
"	freight trains inspected.....	
"	freight crews inspected.....	

Number	passengers admitted.....
"	passengers detained awaiting evidence.....
"	passengers rejected.....
"	sick passengers or freight crews.....
"	passengers from Southern States.....
"	passengers from Northern States.....

Remarks:

Assistant to State Health Officer.

The following chronological summary of events connected with the occurrence of yellow fever in the United States during the past year, which has been compiled by Dr. Hiram Byrd, First Assistant to the State Health Officer, from the diary of the Board, may be of interesting reference for refreshing the memory on incidents and circumstances connected with this outbreak:

BRIEF OF EVENTS CONNECTED WITH YELLOW FEVER
IN 1905.

With special reference to Florida.

May 24.—U. S. Public Health and Marine-Hospital Service announces the existence of yellow fever in Belize.

July 13.—Two physicians in New Orleans report to City Health Officer Kohnke the existence of two cases of sickness resembling yellow fever. Dr. Kohnke investigates and withholds diagnosis but institutes sanitary measures directed against yellow fever.

July 15.—Excursion Pensacola to New Orleans, five day limit.

July 19.—Existence of yellow fever in New Orleans denied.

July 20.—Dr. Anderson, of Pensacola, gets letter from Dr. Kennedy of Pensacola, who was in New Orleans at this time, informing him of probability of yellow fever in New Orleans.

Dr. Anderson wires Dr. Porter rumors of yellow fever in New Orleans.

Dr. Porter wires Surgeon-General Wyman, informing him of rumors and asking for further information.

July 21.—Drs. Goldthwaite and Mohr, of Alabama, go to New Orleans to investigate, and report yellow fever.

Alabama quarantines against New Orleans.

Surgeon White ordered to New Orleans.

State Health Officer Tabor, of Texas, issues order prohibiting persons from New Orleans entering the State.

- July 22.—Italian died in New Orleans.
Autopsy on Italian confirms diagnosis of yellow fever.
White confirms diagnosis of two cases of yellow fever.
Dr. Anderson of Pensacola puts on train inspectors at Flomaton, Ala., in the name of the State Health Officer of Florida.
Dr. Porter recommends establishment of detention camp at Flomaton, Ala.
- July 23.—Drs. Tabor and Ross of Texas, and Haase of Memphis arrive in New Orleans to look into situation.
Havana quarantines against New Orleans.
Dr. Ross of Austin, Texas, at request of Dr. Tabor, remains in New Orleans to look after Texas' interests.
- July 24.—Officially stated that there had been seventeen cases and 6 deaths from yellow fever to date.
State Board of Health of Louisiana, after heated discussion adopts six days detention for all vessels from yellow fever ports.
State Board of Health decides to quarantine State of Louisiana against New Orleans.
Dr. Hunter, State Health Officer of Mississippi, quarantines State of Mississippi against whole State of Louisiana because latter not quarantined against city of New Orleans.
Governor Jelks, of Alabama, extends quarantine to include all places on L. & N. Railroad from New Orleans to Alabama line.
Memphis decides not to quarantine against New Orleans.
Dr. Porter leaves Key West for Jacksonville, via Miami.
Dr. Byrd detailed to Flomaton to take charge train inspection at that point.
U. S. Detention Camp established at Wavel, on L. & N. Railroad between New Orleans and Alabama line.
- July 25.—City Board of Health of New Orleans reports to State Board of Health that between July 13th and July 21st there had been in New Orleans about one hundred suspects and positive cases and 20 deaths, and since July 21st, 54 cases and 12 deaths, from yellow fever.
- July 26.—New Orleans reports 11 new cases and 6 deaths.
Texas quarantines against State of Louisiana.
Dr. Porter issues a proclamation on sanitation, to the public.
Dr. Bartlett wires suspicious case in Tampa.
- July 27.—New Orleans reports 26 new cases and 8 deaths.
Dr. Porter pronounces Victor Vitello, an Italian in West Tampa, who came from New Orleans July 22nd, as having yellow fever; and increases scope of preventive and destructive work against the infection, instituted by Dr. Bartlett.
State Board of Health meets in Jacksonville, Fla., in special session.

- July 28.—New Orleans reports 21 new cases and 3 deaths.
Case yellow fever reported at Lumberton, Miss.
Memphis quarantines against New Orleans.
State Health Officer of Alabama recommends that Alabama not quarantine against Tampa.
Hon. E. M. Hendry, president of the State Board of Health of Florida, goes to Tallahassee to make arrangements for special fund to be used by the State Board of Health in the yellow fever campaign.
Dr. Porter institutes sanitary measures in West Tampa calculated to prevent further infection of mosquitoes and to destroy those that might already be infected.
- July 29.—New Orleans reports 29 new cases and 7 deaths.
- July 30.—New Orleans reports 27 new cases and 3 deaths.
Controversy between Gov. Vardaman, of Mississippi, and Dr. Souchon, of Louisiana, brewing.
- July 31.—New Orleans reports 21 new cases and 5 deaths, making a total of 364 cases and 62 deaths to date.
Case of yellow fever reported at Morgan City, Ala.
Arkansas State Board of Health quarantines against New Orleans and all infected places.
Texas extends quarantine to include all of Louisiana.
Dr. Juan Guiteras of Havana arrives in Tampa.
Controversy between Governor of Mississippi and State Health Officers of Louisiana, waxes warmer.
- August 1.—New Orleans reports 42 new cases and 6 deaths.
Yellow fever report at Shreveport, La., confirmed.
Six cases yellow fever reported in Plaquemine Parish, fifty miles south of New Orleans.
Yellow fever reported in Terra Bonne Parish.
Yellow fever reported in Jefferson Parish.
William Minnihett pronounced suffering an attack of yellow fever in Montgomery, Ala.
Havana extends quarantine to include Florida ports.
United States Court moved from New Orleans to Atlanta on account of quarantine.
Controversy between Governor of Mississippi and State Health Officer of Louisiana taken up by Governor of Louisiana.
- August 2.—New Orleans reports 32 new cases and 11 deaths.
Savannah quarantines against New Orleans.
Clash between Louisiana and Mississippi seems imminent.
Dr. Porter puts on train inspectors at Jasper, Folks-ton, Crawford and Yulee.
President Hendry, of the State Board of Health of Florida, issues proclamation reaffirming the authority of the State Health Officer to institute such quarantine restrictions as in his judgment the emergencies require.
- August 3.—New Orleans reports 54 cases and 5 deaths.
Calcasieu Parish gives notice that after midnight of that date, neither passengers nor freight trains will be permitted to enter said parish, thus effectually cutting themselves off from the world.

- August 3.—Continued.
Charleston declares quarantine against New Orleans and other infected places.
- August 4.—New Orleans reports 43 new cases and 5 deaths.
Gov. Blanchard wires President Roosevelt asking the Federal Government to take charge of the situation.
President Roosevelt places request before Surgeon-General Wyman and urges him to comply with same.
Wilmington quarantines all infected places.
Kentucky invites refugees.
Dr. Diggett arrested by mayor of Folkston.
Dr. Diggett directed by Dr. Porter to withdraw from Folkston to Camp Perry and continue train inspection.
- August 5.—New Orleans reports 30 new cases and 8 deaths.
Archbishop Chappelle stricken.
Indicated that Surgeon White will be placed in control of situation.
Beaufort quarantines against all infected places.
Memphis puts on rigid quarantine.
Clash between Mississippi and Louisiana ended.
Shreveport train service cancelled.
- August 6.—New Orleans reports 28 new cases and 8 deaths.
Details of arrangement for U. S. P. H. & M. H. S. to take charge of situation, completed. Citizens pledge necessary funds.
Judge E. H. Hamn of Pensacola dies of what the attending physician pronounces rabies. Autopsy held by Dr. Anderson. A dark fluid found in stomach resembling "black vomit." Nothing else of suspicious nature found.
- August 7.—New Orleans reports 32 new cases and 8 deaths.
6 cases reported from St. Charles Parish.
Nineteen cases reported from Paterson, St. Mary's Parish.
Four cases reported in Vera Cruz, N. M.
One case reported at Coatzacoalcas, N. M.
Marine Hospital Service formally takes charge of situation.
- August 8.—New Orleans reports 60 new cases and 4 deaths.
One new case in Iberville Parish.
Cordele, Ga., quarantines against all points in Louisiana or Mississippi and Mobile and Montgomery.
- August 9.—New Orleans reports 63 new cases and 4 deaths.
Two new cases reported at Paterson.
One death at Bon Ami in Calcasieu Parish.
Archbishop Chappelle dies.
- August 10.—New Orleans reports 68 new cases and 5 deaths.
Two cases reported on Diamond Plantation, St. Charles Parish.
Eleven cases reported on Reserve Plantation, St. Charles Parish.
One case reported on Sarpy Plantation, St. Charles Parish.
Assistant Surgeon Berry develops yellow fever, in New Orleans.

- August 11.—New Orleans reports 61 new cases and 9 deaths.
Paterson reports 4 new cases.
Cordon around infected district in West Tampa removed.
- August 12.—New Orleans reports 105 new cases and 9 deaths.
This was the maximum number reported in any one day during entire epidemic.
Secondary infection reported in Terra Bonne Parish, Ardoyne Plantation.
State Health Officer of Florida directs sheriff of Franklin county to arrest and hold in detention officers and crew of steamer John R. Sharp, bound from Georgia points down the Chattahoochee River, for disregard of quarantine regulations.
- August 13.—New Orleans reports 50 new cases and 12 deaths.
Dr. Porter issues an order that all passengers for Florida secure identification cards or certificates of ten days' previous whereabouts.
- August 14.—New Orleans reports 55 new cases and 12 deaths.
Plaquemine Parish reports 12 new cases.
Birmingham raises quarantine against Montgomery.
Dr. Porter cables asking why Cuban restrictions against Florida are continued.
- August 15.—New Orleans reports 62 new cases and 6 deaths.
Report of yellow fever outside of city compiled shows 129 cases and 24 deaths.
Dr. Juan Guiteras arrives in New Orleans.
Dr. Kennedy, City Health Officer of Atlanta, protests against Dr. Porter honoring only Marine Hospital certificates from Atlanta. Wires Dr. Porter. Dr. Porter stands pat.
Victor Vitello in West Tampa discharged and restrictions removed.
- August 16.—New Orleans reports 66 new cases and 4 deaths.
Governor Lanham of Texas, at request of State Health Officer Tabor, issues quarantine proclamation against entire State of Louisiana.
Dr. Porter issues card of instructions concerning health certificates.
Dr. Porter issues an open letter to the physicians of the State.
- August 17.—New Orleans reports 77 new cases and 4 deaths.
Yellow fever reported in Mississippi City.
Yellow fever reported as spreading in the parishes.
- August 18.—New Orleans reports 62 new cases and 8 deaths.
Yellow fever reported in Starkeville, Miss.
- August 19.—New Orleans reports 56 new cases and 4 deaths.
Four new cases reported in Mississippi City.
- August 20.—New Orleans reports 45 new cases and 4 deaths.
Reported from Mexico that there are only four cases in the republic, all at Vera Cruz.
- August 21.—New Orleans reports 61 new cases and 9 deaths.
- August 22.—New Orleans reports 57 new cases and 9 deaths.
- August 23.—New Orleans reports 53 new cases and 5 deaths.

- August 24.—New Orleans reports 44 new cases and 7 deaths.
Yellow fever reported at Lake Providence.
Mrs. Cressap, dies at Pensacola of what the attending physician had pronounced dengue fever.
Dr. Anderson wires Dr. Porter of Mrs. Cressap's death, and fumigates Cressap's house.
- August 25.—New Orleans reports 65 new cases and 6 deaths.
Seven cases reported in Mexico.
Dr. Porter arrives in Pensacola.
- August 26.—New Orleans reports 47 new cases and 10 deaths.
Governor Vardaman and Dr. Hunter investigate rumors of yellow fever in Memphis.
- August 27.—New Orleans reports 31 new cases and 13 deaths.
Six cases reported at Natchez.
Later in day 20 cases reported in Natchez.
- August 28.—New Orleans reports 45 new cases and 5 deaths.
Yellow fever reported at Escatawpa, Miss.
Dr. Anderson finds three Greeks suspiciously sick in Pensacola. Dr. Porter investigates these cases with Dr. Anderson.
- August 29.—New Orleans reports 45 new cases and 7 deaths.
Drs. Porter and Anderson pronounce the three Greeks in Pensacola as having yellow fever.
Some eight blocks in which the Greeks are sick, are cordoned.
The National health authorities at Washington and the several city and State health officers in the yellow fever zone are notified of the existence of yellow fever in Pensacola.
The transportation companies are forbidden to sell tickets except to places open to yellow fever refugees.
- August 30.
Pensacola:
Dr. Anderson finds Abell, a tailor, sick with yellow fever.
Train from Pensacola east relayed at Escambia.
Dr. Guiteras arrives Pensacola.
Screening and fumigating houses in infected districts begins.
Alabama quarantines against Escambia county.
Elsewhere:
New Orleans reports 46 new cases and 4 deaths.
Vicksburg reports 2 new cases.
One new case reported at Natchez.
Chattanooga extends quarantine.
- August 31.
Pensacola:
No new cases reported to-day.
Dr. Porter issues Bulletin No. 1, defining limitations of communication between the cordoned district and outside world.
Dr. Porter issues Bulletin No. 2, formally placing Dr. Anderson in charge of the cordon, and Drs. Kennedy and D'Alemberte in charge of the fumigation.

August 31.—Continued. *Pensacola.*

Dr. Porter issues Bulletin No. 3, warning people not to leave Pensacola except by permission of the State Health Officer, and warning transportation companies not to take passengers not having permission of the State Health Officer.

Elsewhere:

New Orleans reports 41 new cases and 6 deaths.
Total cases in New Orleans for month, 1,555.
Total cases in New Orleans to date, 1,919.
Total deaths in New Orleans for August, 162.
Total deaths in New Orleans to date, 227.
Gulf Port reports three new cases.
Arkansas quarantines against Florida.

September 1.

Pensacola:

New cases to-day: One, George Dansby.
Deaths to-day: One, Abell, the tailor.
Drs. Guiteras, Porter, Anderson, Simpson, and others hold autopsy on Abell and unanimously pronounce the case one of yellow fever.
Dr. Porter issues Bulletin No. 4, requesting all physicians to report immediately cases that might be classed as suspicious, to the State Health Officer.

Elsewhere:

New Orleans reports 39 new cases and 4 deaths.
Natchez reports two new cases.
New York reports one case yellow fever from Colon.
Navy Yard quarantines against Pensacola.
Governor Cox of Tennessee issues call to the several governors, State Health Officers, and others of the South, asking if they will join in a Southern Quarantine and Immigration Conference.

September 2.

Pensacola:

New cases to-day: One, George Brent.
Deaths to-day: none.
Dr. Porter issues Bulletin No. 5, formally placing Lieut. Geo. C. Alexander of the U. S. Revenue Cutter Service, in charge of Bay and Sound Patrol.
Dr. Porter issues Bulletin No. 6, defining limitations of water traffic.
Revenue Cutter Penrose assigned to duty under Dr. Porter's direction.

Elsewhere:

New Orleans reports 37 new cases and 3 deaths.
Gulf Port reports 8 new cases.
Vicksburg reports 1 case.
Pearlington, 2 cases.
Natchez, 1 case.
Mississippi City, 2 cases.
John C. Caruthers from Pensacola, develops yellow fever in Atlanta.
Valdosta declares quarantine against all infected places.
Hawkinsville puts on quarantine.
"Strained Relations" brewing between Atlanta Board of Health and State Board of Health of Georgia.

September 3.

Pensacola:

New cases to-day, 2.

Miss Genevieve Brent, 108 E. Romana.

John Humphreys, E. Intendencia.

Deaths to-day, none.

Dr. Byrd transferred from Flomaton to Pensacola to assist in the yellow fever situation.

Dr. J. Whiting Hargis appointed Special Assistant to State Health Officer for duty in Pensacola.

Elsewhere:

New Orleans reports 29 new cases and 3 deaths.

Two new cases reported in Vicksburg.

Yellow fever reported in Indian Territory.

Four cases reported in Mexico.

Mobile lifts quarantine against Atlanta.

Atlanta decides not to quarantine against yellow fever.

September 4.

Pensacola:

New cases to-day, 3.

John Garcia, Dredge Caucus.

Mrs. C. B. Ketterer, 202 E. Zaragossa.

C. P. Wintero, King's Boarding House.

Deaths to-day, none.

Cordon placed around city.

Dr. Porter issues Bulletin No. 7, defining hours of communication between Bay Shore and Pensacola.

Dr. Porter issues Bulletin No. 8, defining hours of communication with surrounding country.

Elsewhere:

New Orleans reports 58 new cases and 5 deaths.

Paterson reports 9 new cases and 1 death.

Lake Providence 3 new cases and 1 death.

Terra Bonne Parish, 15 new cases.

St. Charles Parish, 10 new cases.

La Place, St. Johns Parish, 7 new cases.

Amelia, 8 new cases.

Gulf Port, Miss., 5 new cases.

Vicksburg, 2 new cases.

September 5.

Pensacola:

New cases to-day, 4.

Judge Boykin Jones, corner Spring and Strong.

W. H. Fisher, 212 N. Devillier.

Fritz Househalter, 240 E. Intendencia.

Horace Rosique, 240 E. Intendencia.

Deaths to-day none.

Dr. Porter issues Bulletin No. 9, defining limitation of vessels, and requirements of crews.

Elsewhere:

New Orleans, 32 new cases and 2 deaths.

Tallulah reports 20 cases.

Lake Providence reports 20 new cases.

Six new cases reported at Vicksburg.

J. C. Caruthers dies in Atlanta.

September 6.

Pensacola:

New cases to-day, 1.

Herman Pinney.

Deaths to-day, none.

Dr. Gonzales arrested, charged with interfering with Board of Health and circulating false rumors.

Elsewhere:

New Orleans, 31 new cases and 4 deaths.

Paterson reports 12 new cases.

Tallulah, 21 new cases.

Lake Providence, 9 new cases.

State Board of Health of Georgia tries to force Atlanta to quarantine.

September 7.

Pensacola:

No new cases to-day.

No deaths to-day.

Steamer Tarpon refused a landing at Carrabelle and Apalachicola.

Dr. Porter wires Governor Broward of action, requesting Governor to instruct sheriff of Franklin county to protect the landing of steamer Tarpon at Apalachicola.

Elsewhere:

New Orleans reports 30 new cases and 6 deaths.

Leeville, total to date, cases 325; deaths 33.

Paterson, 8 new cases.

Tallulah, 16 new cases.

Kenner, 2 new cases, 1 death.

Hansen City, 4 new cases.

Vicksburg, 3 new cases.

Natchez, 1 new case.

Gulf Port, 3 new cases.

State Board of Health of Georgia quarantines against infected points.

September 8.

Pensacola:

New cases to-day, 10.

Horace Coberger, E. Church St.

Frang DeVilliers, 215 E. Intendencia.

M. Christman, 116 1-2 S. Tarragona.

H. D. Brook, Park Hotel.

Nina Williams, 117 E. Intendencia.

Chas. Nell, Jr., 130 B. St.

W. H. Ketterer, 202 E. Zaragossa.

Gussie Ketterer, 202 E. Zaragossa.

Susie Ketterer, 202 E. Zaragossa.

J. E. Reed, 24 W. Intendencia.

One death to-day, C. P. Winters, King's Boarding House.

Dr. Porter issues Bulletin No. 10, modifying restrictions on parties living in infected districts in the city.

Dr. Porter issues Bulletin No. 11, revoking certain permits to travel to and from city, and extending cordon line north to include Goulding.

September 8.—Continued.

Elsewhere:

New Orleans reports 44 new cases and 4 deaths.
 Paterson, 11 new cases and 1 death.
 Bayou Boeuf, 4 cases.
 Riverside Plantation reports 180 cases to date and 11 deaths.
 Tallulah, 7 new cases.
 Lake Providence, 7 new cases.
 Natchez reports 2 new cases.
 Gulf Port, 5 new cases.

September 9.

Pensacola:

New cases to-day, 2.
 Jim Burns, 309 W. Zaragossa.
 Miss Cassidey, 311 W. Gadsden (later it was determined that patient had typhoid and not yellow fever).
 Deaths to-day, one, W. H. Fisher.

Elsewhere:

New Orleans reports 41 new cases and 1 death.
 Vicksburg, 3 new cases.
 Natchez, 2 new cases.
 Gulf Port, 6 new cases.
 Atlanta Board and State Board at odds.

September 10.

Pensacola:

No new cases, though several suspicious ones.
 No deaths.

Elsewhere:

New Orleans reports 27 new cases and 7 deaths.
 Vicksburg, 4 new cases.
 Gulf Port, 1 new case.
 Natchez, 1 new case.

September 11.

Pensacola:

New cases today, 8.
 O. R. Wolfburg, Perdido Wharf.
 John Kramer, 123 W. Government.
 Ralph Berlin, 108 W. Chase.
 J. C. Svenske, Park Hotel.
 Unknown Russian, found in woods near Ferry Pass.
 Willie Golf, colored, 214 S. Tarragona.
 Martha Harris, colored, 110 S. Tarragona.
 Diani Milton, colored, 214 S. Tarragona.
 The deaths to-day are 2.
 O. R. Wolfburg, Perdido Wharf.
 M. Christman, 116 1-2 S. Tarragona.
 Total cases to date, 38.
 Total deaths to date, 6.
 Citizens organize relief department.
 Executive office of Board moved from Jacksonville to Pensacola.
 Bulletin No. 12.

September 11.—Continued.

Elsewhere:

New Orleans reports 39 new cases and no deaths.
 Kenner, 5 new cases.
 Hansen City, 2 new cases, 1 death.
 Amelia, 2 cases.
 Boeuf, 1 new case.
 St. Elizabeth Plantation, 1 death.
 Clark Cheniere, 7 cases.
 St. Rose, 1 new case.
 Florenceville, 1 new case, 1 death.
 Paterson, 9 new cases.
 Lake Providence, 8 new cases, 1 death.
 Mississippi City, 2 new cases.
 Gulf Port, 3 new cases.

September 12.

Pensacola:

New cases, none.
 Deaths to-day, one, name not known, found in woods near Ferry Pass.

Elsewhere:

New Orleans reports 43 new cases and 3 deaths.
 Paterson, 5 new cases.
 Kenner, 2 new cases.
 Hansen City, 2 new cases.
 St. Rose, 6 new cases.
 Paterson Plantation, 1 case.
 Lafayette, 1 case.
 Mississippi City, 6 new cases.
 Gulf Port, 1 new case.
 Natchez, 1 new case.
 Vicksburg, 1 new case.
 One case reported in Michigan.

September 13.

Pensacola:

No new cases.
 No deaths.
 Under treatment, 13.
 Drs. Banks and Porter select site for detention camp between Century and Bluff Springs.

Elsewhere:

New Orleans reports 43 new cases and 4 deaths.
 Paterson, 16 new cases.
 Alexandria, 1 new case.
 Lafayette, 1 new case.
 Elizabeth Plantation, 2 new cases.
 Kenner, 1 new case.
 Hansen City, 4 new cases.
 Strouse, 2 new cases.
 Barrataria, 1 new case.
 Clark Cheniere, 4 new cases.
 Mississippi:
 Natchez, 2 new cases.
 Gulf Port, 1 new case.
 Hamburg, 4 new cases.
 Gov. Jelks protests against detention camp being located at site selected—too close to his sacred domain.

September 14.

Pensacola:

New cases to-day, 3.

Albert White, 13 E. Intendencia.

J. L. Johnson, colored, 113 S. Tarragona.

Florida Myers, colored, 113 S. Tarragona.

Deaths to-day, 2.

Strata Couneas, a Greek.

H. D. Brook, King's Boarding House.

Elsewhere:

New Orleans reports 49 new cases and 6 deaths.

Paterson, 20 new cases, 2 deaths.

Kenner, 8 new cases, 2 deaths.

Clark Cheniere, 1 death.

Berwick, 1 death.

Mississippi City, 2 new cases.

September 15.

Pensacola:

No new cases, no deaths.

Dr. Porter issues Bulletin No. 13, modifying quarantined territory.

Elsewhere:

New Orleans reports 43 new cases, 2 deaths.

Willswood, 2 cases.

St. Rose, 3 new cases.

Kenner, 5 new cases.

Terra Bonne Parish, 6 new cases.

Paterson, 19 new cases.

Tallulah, 18 new cases, 1 death.

Lake Providence, 15 new cases.

St. Bernard Parish, 1 death at Italianville.

Shellburne, 1 case.

Mississippi:

Hamburg, 2 new cases.

Vicksburg, 1 new case.

Gulf Port, 1 new case.

Natchez, 3 new cases.

Five cases among refugees in Cincinnati.

September 16.

Pensacola:

New cases to-day, 2.

Wm. T. King, 120 E. Government.

Mary Montgomery, colored, 211 E. Romana.

Deaths to-day, none.

Dr. Porter issues Bulletin No. 14, removing cordon around first infected district in city.

Elsewhere:

New Orleans reports 42 new cases, 2 deaths.

Natchez reports 2 new cases.

Vicksburg, 2 new cases.

Four more cases develop yellow fever in Cincinnati.

Formal call issued by governors of twelve States for Chattanooga conference to be held November 9th.

September 17.

Pensacola:

No new cases, no deaths.

Site selected by Drs. Banks and Porter for detention camp for Pensacola refugees.

September 17.—Continued.

Elsewhere:

New Orleans, 24 new cases, 2 deaths.

Kenner, 7 new cases, 1 death.

La Fourche Crossing, 2 cases.

St. Rose, 1 death.

Tallulah, 9 new cases.

Barrataria, 6 new cases.

Terra Bonne Parish, 22 new cases for 2 days.

Paterson, 10 new cases.

September 18.

Pensacola:

No new cases to-day.

Cases under treatment, 5.

Elsewhere:

New Orleans reports 34 new cases, 6 deaths.

Yellow fever reported in Merrouge, Morehouse Parish, near Texas line.

Bayou Boeuf, 2 new cases.

Paterson, 4 new cases.

Tallulah, 10 new cases, 1 death.

Kenner, 9 new cases.

St. Rose, 3 new cases.

Terra Bonne Parish, 17 new cases 1 death.

Bayou Natchez, 4 new cases.

St. Bernard Parish, 3 new cases.

Evergreen, 2 cases.

Lake Providence, 9 new cases, 2 deaths.

Vicksburg, 2 new cases, 1 death.

Natchez, 2 new cases.

Hamburg, 1 new case.

September 19.

Pensacola:

New cases to-day, 1.

Chas. H. Roberts, Commercial Hotel.

Deaths, none.

Dr. Porter issues Bulletin No. 15, requiring freighters to go to quarantine 5 days after leaving Pensacola and before going elsewhere in the State.

Elsewhere:

New Orleans reports 34 new cases, 4 deaths.

Kenner, 3 new cases, 1 death.

Alexandria, 2 new cases.

Harvey's Canal, 1 case.

Amelia, 4 new cases.

Bayou L'Ourse, 3 new cases.

Bayou Boeuf, 1 new case.

St. Rose, 1 new case.

Grand Isle, 1 new case.

Natchez, 2 new cases.

Gulf Port, 1 new case.

Mississippi City, 2 new cases.

Vicksburg, 6 new cases.

Texas quarantines against Cuba.

September 20.

New cases to-day, 5.

Jonnie Robinson, on beach, near Perdido wharf.

J. A. Perdue, 416 E. Wright.

Mr. and Mrs. Jackson, Quigley's Alley.

Emma Irwin, colored 406 S. Cevallos.

Deaths to-day, none.

Temperature to-day, max. 68 deg., min. 72 deg., mean 80 deg.

Epidemic established—henceforth one or more cases reported every day.

Dr. Porter begins issuing full report of situation at close of each day (prior to this time the mayor had been issuing a bulletin three or four times a day, which had led to more or less confusion.)

Elsewhere:

New Orleans reports 50 new cases, 6 deaths.

Kenner, 11 cases, 1 death.

Paterson, 10 cases.

Baton Rouge, 1 case.

Bayou Natchez, 2 deaths.

Natchitoches, 1 death.

Tallulah, 12 new cases.

Waggaman, 2 new cases.

Point Celeste, 3 new cases;

One case reported at Progreso, Mexico.

September 21

Pensacola:

New cases to-day 6.

Deaths to-day, none.

Total cases to date, 55.

Total deaths to date, 9.

The new cases to-day are:

Geo. Hall, 420 W. Cervantes.

R. L. Williams, 414 E. Main.

Jas. Johnson, 414 E. Main.

John F. Wilson, 227 E. Intendencia.

Clara Geri, 206 E. Church.

Wm. Stone, colored, 810 W. Johnson.

Temperature: max. 85 deg., min. 68 deg., mean 76 deg.

Dr. Andrade, State Bacteriologist, arrives at Pensacola.

*Elsewhere:**Louisiana:*

New Orleans 36 new cases, 4 deaths.

Gross Tete, Iberville Parish, 2 new cases.

Kenner, 5 new cases.

St. Bernard, 3 new cases.

Tallulah, 6 new cases.

Bunkie, 1 case.

Bayou Dulac, 1 case.

Alexandria, 2 new cases.

Paterson, 16 new cases, 1 death.

Mississippi:

Vicksburg, 3 new cases.

Natchez, 3 new cases.

Texas modifies quarantine against Havana.

September 22.

Pensacola:

New cases to-day, 6.

Deaths to-day, 1.

Total cases to date, 61.

The new cases are:

Mrs. Regan on beach, near Perdido Wharf.

W. B. Cole, 121 W. Government.

M. E. Gross, 405 S. Olivia.

S. O. Williams, 414 E. Main.

Harry Miller, E. Chase.

Tom Clopton, colored, 619 W. Belmont.

The deaths to-day are:

R. L. Williams, 414 E. Main.

*Elsewhere:**Louisiana:*

New Orleans, 37 new cases, 4 deaths.

Paterson, 9 new cases.

Kenner, 5 new cases.

Tallulah, 6 new cases.

Huma, 3 new cases.

Terra Bonne Parish (report for 5 days),

Crescent Farm, 33 new cases, 1 death.

Belle Grove, 27 new cases, 2 deaths.

Ardoynes, 10 new cases.

Mosie Settlement, 2 new cases.

Rebecca, 2 new cases.

Bunkie, 1 case.

Plantations around Tallulah, 20 cases.

Alexandria, 2 new cases.

Mississippi:

Roxie, 4 new cases.

Harrison, 1 new case.

Hamburg, 1 new case.

Vicksburg, 7 new cases.

Natchez, 4 new cases.

Gulf Port, 2 new cases.

September 23.

Pensacola:

New cases to-day, 6.

Deaths to-day, 1.

Total cases to date, 67.

Total deaths to date, 11.

The new cases are:

Ed Wise, 317 E. Intendencia.

Jack Daniels, 611 E. Belmont.

Chris Mandel, 508 S. Cevallos.

Wm. Kroll, 518 S. Cevallos.

Chas. Larkin, colored, 214 E. Romana.

Sallie Williams, colored, 37 Luke's Alley.

The deaths to-day:

J. A. Perdue, 416 E. Wright.

Temperature: max. 92 deg., min. 69 deg., mean 80 deg.

*Elsewhere:**Louisiana:*

New Orleans, 46 new cases, 6 deaths.

Paterson, 8 new cases.

September 23.—Continued.

Barataria, 21 new cases, 2 deaths.
 Kenner, 2 new cases, 3 deaths.
 Port Barrow, (7 days report) 10 new cases.
 Smoke Bend, 1 new case.
 Tallulah, 5 new cases.
 Kemps Bend, 1 new case.
 Reserve Plantation, 1 new case.
 Point Celeste, 1 death.
 Barataria Camps, 12 new cases.
 Lake Providence, 14 new cases, 1 death.
 Alexandria, 1 new case.

Mississippi:

Hamburg, 2 new cases.
 Natchez, 8 new cases.
 Gulf Port, 4 new cases.
 Handsboro, 2 new cases.
 Vicksburg, 1 new case.

September 24.

Pensacola:

New cases to-day, 9.
 Deaths to-day, none.
 Total cases to date, 76.
 Total deaths to date, 11.

The new cases are:

Mrs. Thorsen, 702 W. Main.
 Mrs. Kerr, 417 E. Intendencia.
 Mrs. L. F. Joh, 214 S. Alcaniz.
 Mrs. Peris, 435 E. Zaragossa.
 Edith Peris, 435 E. Zaragossa.
 Mr. Carlos Haas, 216 E. Government.
 Mrs. Marie Haas, 217 E. Government.
 Floyd Stridiron, colored, 416 E. Garden.

Temperature to-day, max. 89 deg., min. 72 deg., mean 80 deg.

Elsewhere:

Louisiana:

New Orleans, 24 new cases, 2 deaths.
 Paterson, 8 new cases.
 Kenner, 8 new cases, 1 death.
 La Fourche Crossing, 1 new case.
 Baton Rouge, 2 new cases.
 Tallulah, 4 new cases.
 Alexandria, 2 new cases.

Mississippi:

Natchez, 5 new cases.
 Hamburg, 4 new cases.
 Vicksburg, 4 new cases.
 Harrison, 1 new case (unofficial).
 Gulf Port, 1 new case.
 Mississippi City, 1 new case.
 Handsboro, 1 new case.

Arkansas quarantines Florida oranges.

Chattanooga adopts stringent quarantine measures.

September 25.

Pensacola:

New cases to-day, 25.

Deaths to-day, 1.

Total cases to date, 101.

Total deaths to date, 12.

The new cases are:

Lena Albritton, colored, 424 E. Intendencia.
 Alice Brooks, 128 E. Chase.
 S. W. McNeill, 28 S. Cevallos.
 O. Lindberg, 209 S. Alcaniz.
 J. C. Gunter, near Brent Station.
 Adelle Phillips, 514 E. Zaragossa.
 Mrs. Sallie Whitmire, 625 Heinberg.
 Violet Swanson, 210 N. 9th ave.
 W. L. Vermillion, 625 Heinberg.
 Vasemann, German Ship Kaiser.
 Anderson, German Ship Kaiser.
 Myer, German Ship Kaiser.
 Ruter, German Ship Kaiser.
 Evelyn Lewis colored, 215 E. Romana.
 A. B. Pettitway, colored, 312 E. Chase.
 John Williams, colored, 630 E. Government.
 Carrie Toler, colored, 257 E. Chase.
 Wm. Snowball, 630 E. Government.

The death to-day:

C. F. Haas, 217 E. Government.

Temperature: max. 87 deg., min. 70 deg., mean 78 deg.
 Dr. Porter issues Bulletin No. 18, defining restrictions on vessels and crews lying in the harbor.

Elsewhere:

Louisiana:

New Orleans, 37 new cases, 3 deaths.
 Kenner, 8 new cases.
 Tallulah and vicinity, 8 new cases.
 Alexandria, 2 new cases.
 Barodine, 1 new case.
 New Napoleonville, 1 new case.
 Bayou Boeuf and Amelia, (6 days) 13 new cases.
 Terra Bonne Parish, 47 new cases, 4 deaths.
 McDonoughville, 1 new case.
 Fisher's Camp, Barataria, 4 new cases.
 Paterson, 26 new cases.

Mississippi:

Natchez, 3 new cases.
 Vicksburg, 1 new case.
 Gulf Port, 1 new case.
 Roxie, 1 new case, 1 death.
 Mississippi City, 1 new case.

One case yellow fever arrives New York from Colon.

September 26.

Pensacola:

New cases to-day, 8.

Deaths to-day, 2.

Total cases to date, 109.

Total deaths to date, 14.

September 26.—Continued.

The new cases are:

Jasper Finney, 800 W. Main.
Robert Rosique, 240 E. Intendencia.
Teddie Hanson, 417 E. Intendencia.
Bessie Hanson, 417 E. Intendencia.
Percy Hays, W. Main.
Frank Humphreys, 214 E. Intendencia.
Geo. Von Leubke, German Ship Kaiser.
Johannes Baecker, German Ship Kaiser.

The deaths are:

M. E. Gross, 405 S. Devilliers.
Carlos Haas, 217 E. Intendencia.

Temperature: max. 85 deg., min. 74 deg., mean 80 deg.
Dr. Porter issues Bulletin No. 19, appealing to the citizens of Pensacola to give their aid.

Elsewhere:

Louisiana:

New Orleans, 31 new cases, 5 deaths.
Kenner, 3 new cases, 1 death.
Paterson, 6 new cases.
Bunkie, 1 death.
Lutcher, 1 new case.
Grand Isle, 2 new cases.
Tallulah, 5 new cases.

Mississippi:

Gulf Port, 1 new case.
Mississippi City, 4 new cases.
Vicksburg, 4 new cases.
Natchez, 8 new cases.
Hamburg, 3 new cases.

September 27.

Pensacola:

New cases to-day, 6.
Deaths to-day, 2.
Total cases to date, 115.
Total deaths to date, 16.

The new cases are:

Ed. Crenshaw, 215 E. Romana.
Ellie Shuttleworth, 101 E. Romana.
Elmer White, 13 E. Intendencia.
D. Agala, 605 S. Baylen.
Ben Thomas, 529 E. Government.
Geo. W. Pryor, New City.

The deaths are:

Mrs. Brazier, 500 W. Chase.
J. C. Gunter, near Brent.

Temperature: max. 82 deg., min. 74 deg., mean 78 deg.

Elsewhere:

Louisiana:

New Orleans, 19 new cases, 5 deaths.
Paterson, 6 new cases.
Kenner, 1 death.
Bayou Natchez, 4 new cases.
Gross Tete, 5 new cases.
Rosedale, 3 new cases, 1 death.
Milliken, (7 days) 10 new cases.

September 27.—Continued.

Reserve Plantation, 1 new case.
Terra Bonne Parish, (2 days) 17 new cases, 1 death.

Mississippi:

Hamburg, 1 new case.
Vicksburg, 5 new cases, 4 deaths.
Natchez, 3 new cases, 1 death.
Gulf Port, 4 new cases.
Mississippi City, 1 new case.
Port Gibson, 1 new case.

September 28.

Pensacola:

New cases to-day, 7.
Deaths to-day, 5.
Total cases to date, 122.
Total deaths to date, 21.

The new cases are:

Joseph Fabro, 431 E. Intendencia.
Clara Ketchum, 431 E. Intendencia.
Miss Amelia Brown, 707 E. Belmont.
Reese Everitt, 623 E. Heniberg.
Lily-Belle Everitt, 623 E. Heniberg.
Joe Roulhac, colored, 257 E. Chase.
Lee McClenny, colored, 112 S. Tarragona.

The deaths are:

Mrs. Ellis, 114 N. Alcaniz.
Harry Miller, E. Chase.
Jack Daniels, 611 E. Belmont.
Wm. Stone, colored, 810 Jackson.
Lena Albritton, colored, 424 E. Intendencia.

Temperature: max. 74 deg., min. 68 deg., mean 71 deg.
Dr. Porter receives two anonymous letters.

Elsewhere:

Louisiana:

New Orleans, 23 new cases, 4 deaths.
Tallulah and vicinity, 3 new cases.
Near Napoleonville, 2 new cases.
Terra Bonne Parish, 1 new case.
Baton Rouge, 1 new case.
Paterson, 8 new cases.
Kenner, 4 new cases, 1 death.

Mississippi:

Natchez, 9 new cases.
Hamburg, 4 new cases.
Gulf Port, 3 new cases.
Handsboro, 3 new cases.
Mississippi City, 2 new cases.
Port Gibson, 1 new case.

September 29.

Pensacola:

New cases to-day, 16.
Deaths to-day, 2.
Total cases to date, 138.
Total deaths to date, 23.

September 29.—Continued. *Pensacola.*

The new cases are:

Frank Pou, 236 E. Gregory.
 C. W. Forum, 721 W. Main.
 Mrs. Olsen, Main and Olivia.
 Harry Olsen, Main and Olivia.
 Barney Munson, Main and Olivia.
 J. Golson, 317 E. Intendencia.
 Geo. Capri, St. Anthony's Hospital.
 Modeste Rosique, 240 E. Intendencia.
 Chas. Turner, 803 Aragon.
 Mrs. G. W. Van Etter, 714 W. Main.
 Jerry Scott, 607 E. Belmont.
 Albert Scott, 607 E. Belmont.
 Dr. H. H. Boulter, 313 N. Spring.
 F. G. DeBroux, corner Gregory and 10th ave.
 Belan Smith, NE corner Spring and Wright.
 Mrs. B. B. Smith, NE corner Spring and Wright.

The deaths to-day are:

Thomas Martin, St. Anthony's Hospital.
 Giacoma Angela, 605 S. Baylon.

Temperature: max. 82 deg., min. 72 deg., mean 77 deg.

Elsewhere:

Louisiana:

New Orleans, 28 new cases, 2 deaths.

Mississippi:

Scranton, 4 cases reported.
 Moss Point, 3 cases reported.

September 30.

Pensacola:

New cases to-day, 14.

Deaths to-day, 3.

Total cases for month, 149.

Total cases to date, 153.

Total deaths to date, 26.

The new cases are:

Mrs. Steinna Jacobson, 704 W. Main.
 Willie Savage, 307 Salamanca.
 Jas. W. Eley, corner 10th street, and 22d ave.
 Mr. Williams, Supt. County Poor Farm.
 Miss Ernestine Fordham, 216 E. Zaragossa.
 John Moyer, E. Intendencia.
 Lizzie Barter, 1314 E. Jackson.
 Adele Pyritz, 100 Florida Blanca.
 Robert Touart, 108 Florida Blanca.
 J. W. McMillan, colored, 504 E. Chase.
 Three seamen from German Ship Kaiser.
 Bosco Guiseppe, Italian S. S. Caprera.

The deaths are:

Johannes Braecker, St. Anthony's Hospital.
 Wm. T. King, 120 E. Government.
 Lee McClenny, colored, 112 E. Tarragona.

Temperature: max. 84 deg., min. 76 deg., mean 81 deg.

Elsewhere:

Louisiana:

New Orleans reports 31 new cases, 2 deaths.
 Total cases to date, 3,000.
 Total deaths to date, 388.

September 30.—Continued. *Elsewhere.*

Kenner, (2 days) 8 new cases.
 Baton Rouge, 1 new case.
 Port Barrow, (7 days) 5 new cases, 1 death.
 Paterson, 10 new cases.
 Terra Bonne Parish, 1 new case, 1 death.
 Gretna, 1 new case.
 McDonoughville, 2 new cases.
 Covington, 2 new cases.
 Plattenville, 1 new case.
 Milliken's Bend, 5 new cases, 1 death.
 Tallulah, 2 new cases, 1 death.
 St. Bernard's Parish, 4 new cases.
 Lake Providence, 3 new cases, 1 death.

Mississippi:

Vicksburg, 12 new cases, 2 deaths.
 Hamburg, 3 new cases.
 Gulf Port, 2 new cases.
 Mississippi City, 1 new case.
 Hansboro, 1 new case.
 Moss Point, 4 new cases.
 Scranton, 3 new cases.
 Natchez, 7 new cases.

October 1.

Pensacola:

New cases to-day, 5.

Deaths to-day, none.

Total cases to date, 158.

Total deaths to date, 26.

The new cases are:

Constantine Cheriche, Alcaniz and Intendencia.
 Chas. Soderling, 700 W. Main.
 Miss Agnes Neal, 1130 W. Intendencia.
 Mitch Touart, 404 E. Intendencia.
 Henry Wright, colored 210 E. Romana.

Temperature: max. 82 deg., min. 72 deg., mean 77 deg.

Elsewhere:

Louisiana:

New Orleans, 23 new cases, 3 deaths.
 Kenner, 1 new case, 2 deaths.
 Manderville, 1 new case.
 Tallulah, 13 new cases.

Mississippi:

Vicksburg, 5 new cases.
 Natchez, 5 new cases.
 Scranton, 8 new cases.
 Gulf Port, 1 new case, 1 death.
 Mississippi City, 6 new cases.
 Hamburg, 2 new cases, 1 death.
 Rosetta, 2 new cases.
 Handsboro, 1 new case.

October 2.

Pensacola:

New cases to-day, 8.

Deaths to-day, 1.

Total cases to date, 166.

Total deaths to date, 27.

October 2.—Continued. *Pensacola.*

The new cases are:

Mrs. Schultes, 108 1-2 E. Government.
J. H. Hyde, Central Hotel.
Ira R. Antone, 715 W. Main.
Henry Snowball, 630 E. Government, (colored.)
Ruth Glenn, 3 N. Palafox.
Ruth Turner, 26 S. Tarragona.
Infant of J. L. Leo, 214 S. Alcaniz.
Mr. Bullin, from S. S. Maristow, now in St. Anthony's.

The death to-day:

The death to-day:

Infant of J. L. Leo, 214 S. Alcaniz:

Temperature: max. 82 deg., min. 74 deg., mean 78 deg.

Elsewhere:

Louisiana:

New Orleans, 19 new cases, 2 deaths.
New Orleans Public Schools (except 4) open.

Mississippi:

Natchez, 12 new cases, 2 deaths.
Vicksburg, 16 new cases, 4 deaths.
Gulf Port, 3 new cases.
Port Gibson, 3 new cases, 1 death.

October 3.

Pensacola:

New cases to-day, 9.

Deaths to-day, 3.

Total cases to date, 175.

Total deaths to date, 30.

The new cases are:

Otto Ketterer, corner Zaragossa and Tarragona.
McLellan Lewis, 506 N. 9th ave.
Colon Lewis, 506 N. 9th ave.
Toney Corfeit, 300 E. Romana.
Vera Graham, 107 E. Romana.
Mrs. W. B. Harbuck, 314 S. Alcanaz.
J. H. Reynolds, near Goulding.
John Kelley, Bark Kosmos.
Henry Shuttleworth, 101 E. Romana.

The deaths to-day are:

Dr. H. H. Boulter, 313 N. Spring.
Fred Menge, 2nd Mate Kaiser.
Eddie Beledau, 300 Salamanca (announced as W. Savage.)

Temperature: max. 68 deg., min. 72 deg., mean 79 deg.

Elsewhere:

Louisiana:

New Orleans, 30 new cases, 2 deaths.
Paterson, 5 new cases.
Kenner, 3 new cases, 1 death.
Alexandria, 2 new cases.
Grand Isle, 29 new cases.
Terra Bonne Parish, 7 new cases.

Mississippi:

Vicksburg, 11 new cases.
Natchez, 4 new cases.

October 3.—Continued. *Elsewhere.*

Gulf Port, 5 new cases.
Hamburg, 3 new cases.
Roxie, 3 new cases.
Port Gibson, 7 new cases.

October 4.

Pensacola:

New cases to-day, 10.

Deaths to-day, 2.

Total cases to date, 185.

Total deaths to date, 32.

The new cases are:

Miss Tenie Beck, corner LaRua and DeVilliers.
J. S. Reese, 701 N. Palafox.
H. C. White, 252 E. Chase.
Mrs. Fred Herman, Goulding.
D. H. Ramount, 215 N. 9th ave.
Mrs. H. E. Nolan, Little Bayou.
Calvin Peters, colored, 1109 11th ave.
Maggie Bloney, 257 E. Chase.
Daniel Harris, colored, 112 S. Tarragona.
Lloyd Reed, colored, 112 S. Tarragona.

The deaths to-day are:

F. G. DeBroux, corner Gregory and 10th ave.
Henry Wright, colored, 210 E. Romana.

Temperature: max. 77 deg., min. 72 deg., mean 74 deg.

Dr. Herron arrested under city ordinance charged with interfering with health authorities.

First consignment of refugees go to Camp Murray.

Elsewhere:

Louisiana:

New Orleans, 22 new cases, 4 deaths.
Paterson, 8 new cases.
Kenner, 1 new case.
Bunkie, 1 new case.
Near Thibodeaux, 1 new case.
LaFourche Crossing, 3 new cases.

Mississippi:

Vicksburg, 5 new cases.
Natchez, 2 new cases.
Port Gibson, 1 new case.

October 5.

Pensacola:

New cases to-day, 18.

Deaths to-day, 3.

Total cases to date, 203.

Total deaths to date, 35.

The new cases are:

Jas. Swann, 321 Salamanca.
Jim Varago, 10th avenue and Salamanca.
J. W. Wilkerson, 523 DeLeon.
W. M. Eilkinson, 523 DeLeon.
B. Blitch, 707 W. Main.
John Peters, 120 E. Intendencia.
Alex Bradies, 303 E. Romana.
Gus Nicholas, 28 S. Palafox.
John Nicholas, 28 S. Palafox.

October 5.—Continued *Pensacola*.

F. L. Bowen, Southern Hotel.
 Mabel Hocket, 507 E. Garden.
 Jonnie May Hall, 617 N. Hayne.
 Mary Carry Hall, 420 W. Cervantes.
 Mrs. Rollins, Florida Blanca and Romana.
 The deaths to-day:
 J. H. Hyde, Central Hotel.
 Mrs. Schultes, 108 1-2 E. Government.
 Herr Dultz, Seaman German S. S. Kaiser.
 Temperature: max. 84 deg., min. 69 deg., mean 76 deg.
 Mayor of Apalachicola protests to surgeon-general against S. S. Tarpon landing.
 Surgeon-general refers matter to Dr. Porter.
 Dr. Porter explains that Tarpon had pratique and suggests that collector of customs be instructed to enforce recognition of U. S. pratique.

*Elsewhere:**Louisiana:*

New Orleans, 28 new cases, 3 deaths.
 Kenner, 1 new case.
 Terra Bonne Parish (2 days), 12 new cases.
 Amelia and Bayou L'Ourse (3 days), 7 new cases.
 LaPlace and vicinity (7 days), 26 new cases, 4 deaths.

October 6.

Pensacola:

New cases to-day, 16.
 Deaths to-day, 2.
 Total cases to date, 219.
 Total deaths to date, 37.
 The new cases are:
 Joseph Fulcher, corner 7th avenue and 14th street.
 J. E. Watson, 604 E. Wright.
 Three Olsen Children, Main and Olivia.
 G. H. Green, 610 E. Belmont.
 Isaac Henderson, St. Anthony's Hospital.
 A. J. Blitch, 610 E. Belmont.
 Mrs. H. E. Gibson, St. Anthony's Hospital.
 Mrs. Kate Pevich, 421 E. Intendencia.
 Mannie Rivers, East Garden.
 Mrs. W. S. Sharpe, 628 E. Government.
 W. C. Sharpe, 628 E. Government.
 Percy Sharpe, 628 E. Government.
 Mrs. L. N. Amos, 400 Main.
 Frd'k. Bonar, (Brit. Vice-Consul) Baylen and Gregory.

The deaths to-day are:

John Kelley, Norwegian Bark Kosmos.
 Tony Corfeit, 300 N. Romana.
 Temperature: max. 85 deg., min. 70 deg., mean 78 deg.

*Elsewhere:**Louisiana:*

New Orleans, 25 new cases, 4 deaths.

Mississippi:

Vicksburg, 1 new case 1 death, 3 cases in county.
 Natchez, 8 new cases.

October 6.—Continued. *Elsewhere.*

Rosetta, 2 new cases, 1 death.
 Handsboro, 2 new cases.
 Mississippi City, 2 new cases.
 Gulf Port, 3 new cases.
 Hamburg, 4 new cases.
 Port Gibson, 5 new cases.
 Arkansas makes concession: Oranges from non-infected portions of Florida permitted to pass through Arkansas in screened cars, subject to change without notice.

October 7.

Pensacola:

New cases to-day, 15.
 Deaths to-day, 1.
 Total cases to date, 234.
 Total deaths to date, 38.
 The new cases are:
 Mrs. D. C. Eitzen, 416 W. Wright.
 Mrs. A. di Lustro, Alcaniz.
 Mrs. J. I. Bryan, 707 N. Spring.
 Mack Morrill, 508 W. Gregory.
 Mrs. W. M. Wilkinson, 520 DeLeon.
 Mr. Bogart, 700 E. Wright.
 S. C. Donaldson, 410 E. Gregory.
 John M. Boyle, 610 Adams.
 Angus Frater, 318 E. Gregory.
 Jas. Robinson, 706 E. Gregory.
 Louis Ramount, 215 N. 9th ave.
 L. R. White, 311 E. Romana.
 Mrs. M. K. Thomas, 311 E. Romana.
 G. C. Hardy, 308 S. Alcaniz.
 Mrs. Jane Daw, 404 E. Garden.
 The death to-day:
 Mr. Schultes, 108 1-2 E. Government.
 Temperature: max. 79 deg., min. 70 deg., mean 74 deg.

Elsewhere:

New Orleans reports 29 new cases, 3 deaths.

Mississippi:

Natchez, 2 new cases.
 Vicksburg, 9 new cases.
 Superior Board of Health reports 3 new cases at Coatzacoalcos, Mexico.
 Two new cases reported at Vera Cruz.

October 8.

Pensacola:

New cases to-day, 19.
 Deaths to-day, none.
 Total cases to date, 253.
 Total deaths to date, 38.
 The new cases to-day are:
 H. Alfman, S. E. corner Cevallos and Intendencia.
 R. Elchwold, Bears Alley.
 Annie L. Edmondson, 109 S. Clubbs.
 Jas. Simpson, colored, 1015 Heinberg.
 Prine McQueen, 610 E. Wright.
 Henry Jackson, 624 W. Zaragossa.

October 8.—Continued. *Pensacola.*

Eleanor Miller, 19 W. Zaragossa.
Wm. Olsen, corner DeVilliers and Government.
Ernestine Jeudevine, 613 E. Government.
N. Carroll, 609 Salamanca.
A. Greene, 217 E. Jackson.
Mattie Greene, 217 E. Jackson.
Ella Greene, 217 E. Jackson.
Joe Dunklin, 222 E. Chase.
Mary White, 311 E. Romana.
Louise Anderson, 110 E. 10th ave.
W. R. Meriweather, 424 E. Strong.
Annie Simpson, colored, 1015 Heinburg.
Temperature max. 78 deg., min. 70 deg., mean 74 deg.

Elsewhere:

Louisiana:

New Orleans reports 19 new cases, no deaths.
Alexandria, 1 new case.
Gretna, 1 new case.
Jefferson Parish, several cases.

Mississippi:

Vicksburg, 5 new cases.
Natchez, 5 new cases.
Port Gibson, 1 new case.

October 9.

Pensacola:

New cases to-day, 22.
Deaths to-day, 4.
Total cases to date, 275.
Total deaths to date 42
The new cases to-day are:
Joseph Geri, E. Church.
Geo. Berry, 121 W. Government.
Paul Tournoe, 416 W. Wright.
H. A. Greene, 610 E. Jackson.
Miss Victor Oberg, 1,000 N. Alcaniz.
Geo. Byron, 318 E. Intendencia.
L. L. Huey, 131 E. Wright.
Mrs. Fritz Zeer, 906 N. Alcaniz.
Mrs. J. H. Reynolds, Goulding.
Mrs. Lowry, 208 N. 9th ave.
Mrs. Marler, 225 N. Devilliers.
Bryant Cheetam, 225 N. Devilliers.
Violet Williams, 810 DeLeon.
Chas. Williams, 810 DeLeon.
Mary Williams, 810 DeLeon.
Jas. Williams, 810 DeLeon.
Jas. Heatham, 513 E. Intendencia.
Ruth Gold, 513 E. Wright.
Eliza Gold, 513 E. Wright.
Mrs. Lottie Crist, 700 E. Jackson.
Ed. Hitchman, 112 1-2 S. Tarragona.
Miss Ethel Lear, 600 E. Belmont.

The deaths to-day are:

Alez. Bradier, 300 E. Romana.
Eleanor Miller, 119 W. Zaragossa.

October 9.—Continued. *Pensacola.*

Gus Nicholas, 28 S. Palafox.
B. E. Bogart, 700 E. Wright.
Temperature: max. 78 deg., min. 70 deg., mean 74 deg.

Elsewhere:

New Orleans reports 17 new cases, 1 death.
Paterson, 9 new cases, 1 death.
Kenner, 2 new cases, 1 death.
Bayou Natchez, 1 suspicious case, 1 death.
Barataria, 1 death.
Amelia, 2 new cases.
Gretna, 1 new case, 1 death.
Willwood, 2 new cases, 1 death.

Mississippi:

Natchez, 8 new cases.
Roxie, 6 new cases.
Vicksburg, 3 new cases, 1 death; in country 3 new cases.
Hamburg, 1 new case, 1 death.

October 10.

Pensacola:

New cases to-day, 32; the maximum number reached during epidemic.
Deaths to-day, 3.
Total cases to date, 307.
Total deaths to date, 45.
The new cases to-day are:
Mrs. Clifford Touart, 632 E. Government.
Johnnie Johnson, 414 E. Main.
Nic. Stranfield, Head of Muscogee Wharf.
Chris Marselles, Head of Muscogee Wharf.
Lillie Johnson, 207 N. DeVillier.
Mrs. Mary Barr, 1211 E. Jackson.
Annie May Barr, 1211 E. Jackson.
Minnie L. Dennis, 401 E. Gregory.
Bertha Booske, 618 Salamanca.
Emily Booske, 618 Salamanca.
Mattie Bishoff, 127 W. Intendencia.
Michael Quigles, 216 S. Florida Blanca.
Mrs. W. T. Barker, 1213 N. Davis.
Eugene Sewall, near corner Reus and Belmont.
Geo. Maxwell, corner near L. & N. Depot.
Joe Seegar, 608 E. Belmont.
Jerry Sullivan, Jr., 610 N. Davis.
W. H. Nealeans, 413 S. Cevallos.
Henry Marler, 225 N. DeVillier.
Mattie Gold, 513 E. Wright.
Alven Crosby, Wright and A.
Mrs. J. R. Edwards, Sth and Jackson.
F. Herman, Goulding.
Willie Butler, 412 E. Belmont.
Sam George, colored, Goulding.
Chas. Lott, colored, 255 E. Intendencia.
Eugene Hyers, colored, 204 S. Alcaniz.
Toby Elijah, colored, 612 W. Zaragossa.
Francis Lloyd, colored, 617 N. DeVillier.

October 10.—Continued. *Pensacola.*

Willie Lloyd, colored, 617 N. DeVillier.
 Carrie Lloyd, colored, 617 N. DeVillier.
 The deaths to-day are:
 Hon. Frederick N. Bonar, British Vice-Consul.
 F. C. Bowen, Southern Hotel.
 Wm. Olsen, Deputy Harbor Master.
 Temperature: max. 81 deg., min. 69 deg., mean 75 deg.
 Dr. Herron fined \$25.00 for interfering with city health authorities.

Elsewhere:

Louisiana:
 New Orleans, 18 new cases, 4 deaths.
 Kenner, 5 new cases.
 Near Plattenville, 2 new cases.
 Barataria, 1 new case.
 Covington, 1 new case.
 New Iberia, 2 new cases.
Mississippi:
 Natchez, 6 new cases.
 Gulf Port, 5 new cases.
 Port Gibson, 2 new cases.

October 11.

Pensacola:

New cases to-day, 24.
 Deaths to-day, none.
 Total cases to date, 331.
 Total deaths to date, 45.
 The new cases to-day are:
 Thos. Williams, 11th and Tarragona.
 E. L. Herring, Goulding.
 Gertrude Wilkerson, 523 DeLeon.
 W. T. Nealeans, 413 S. Cevallos.
 Constance Smith, 109 S. 9th street.
 Estella Siclero, St. Anthony's Hospital.
 Chas. Touart, 401 E. Intendencia.
 Phillip Moody, 721 W. Main.
 J. J. Jernigan, 1213 N. Davis.
 Lilla Allen, DeLeon and 10th.
 Ada Daw, 404 E. Garden.
 Burdette White, 311 E. Romana.
 Mrs. John Massey, 702 W. Garden.
 Miss Mamie Stewart, 501 Hayne.
 Miss Mattie Hammac, St. Anthony's Hospital.
 Geo. Heinero, Reus and Barcelona.
 Henry Monk, 16 W. Gregory.
 Astergreu, near Goulding.
 Miss Bertha Butler, 412 E. Belmont.
 Herbert Butler, 412 E. Belmont.
 Lois Butler, 412 E. Belmont.
 Mrs. S. S. Piney, 601 W. Garden.
 G. J. Morgan, 131 E. Wright.
 Ellie Allen, near Brent.
 Temperature: max. 69 deg., min. 55 deg., mean 62 deg.

October 11.—Continued. *Pensacola.*

Citizens Committee makes appeal to State Health Officer for \$40,000 of the State Board of Health funds with which to prosecute fight against yellow fever. Citizens Committee appeals to Governor for same. State Health Officer places matter before State Board of Health.

Elsewhere:

Louisiana:
 New Orleans reports 16 new cases, 2 deaths.
 Near Bunkie, 2 new cases.
 Grand Isle, several new cases, 1 death.
 Cheniere Caminida, many new cases.
 Lucy, St. John's Parish, 3 new cases.
 Kenner, 2 new cases, 1 death.
 Paterson, 1 new case.
Mississippi:
 Vicksburg, 5 new cases in city, 1 in country.
 Natchez, 5 new cases.
 Gulf Port, 1 new case.
 Port Gibson, 3 new cases.
 Norfolk, Va., raises quarantine against infected points.

October 12.

Pensacola:

New cases to-day, 23.
 Deaths to-day, 3.
 Total cases to date, 354.
 Total deaths to date, 48.
 The new cases to-day are:
 Mrs. Rollins, 101 Florida Blanca.
 Mr. Hail, 530 E. Government.
 Mary Lovett, Cevallos and Government.
 Norman Dowdy, colored, Tarragona and Zarragossa.
 Mrs. Leila Harrison, 510 N. Government.
 Julius Mencko, 35 E. Chase.
 John Grace, 518 N. Tarragona.
 J. I. Stephens, 120 S. Palafox.
 Willie Bogart, 102 E. Wright.
 Eva Perdue, 414 E. Wright.
 Mrs. Walker Humphries, 305 E. Gregory.
 Mrs. Chas Harris, 1113 W. LaRue.
 Laura Carroll, 404 S. DeVillier.
 Moreno Carroll, 404 S. DeVillier.
 Miss Genevieve Murphy, 420 Hayne.
 Mrs. C. R. Barter, 1314 E. Jackson.
 Mrs. Bertha Butler, 412 E. Belmont.
 Herbert Butler, 412 E. Belmont.
 Lois Butler, 412 E. Belmont.
 Mrs. S. S. Pinney, 601 W. Garden.
 G. J. Morgan, 131 E. Wright.
 Elie Allen, near Brent.
 Lillian Floyd, colored, 617 N. DeVillier.
 The deaths to-day are:
 Young B. Cheetham, 225 N. DeVillier.
 W. M. Wilkinson, 520 DeLeon.
 Miss Gibson, St. Anthony's Hospital.

October 12.—Continued. *Pensacola.*

President Hendry of State Board of Health takes up with the Governor matter of allowing the funds of the Board to be used to further the fight against yellow fever.

President Hendry authorizes Dr. Porter to prosecute fight with renewed vigor, using as much of the funds of the Board as he finds necessary.

Two cases yellow fever reported at Castleberry, Ala. Dr. Porter quarantines Florida against Escambia and Conecuh counties, Ala.

Elsewhere:

Louisiana:

New Orleans, 15 new cases, 2 deaths.
Franklin, 1 new case.
New Iberia, 11 new cases.
Near Plattfield, 1 new case.
Paterson, 7 new cases, 1 death.
Tallulah, 3 new cases.
Lake Providence, 3 new cases, 1 death.

Mississippi:

Hamburg, 1 death, no new cases.
Vicksburg, 2 new cases, no deaths.
Port Gibson, 4 new cases.
Natchez, 5 new cases.
Mississippi City, 2 new cases.

Light frost reported at Natchez and elsewhere in Mississippi.

Many local quarantines in Mississippi relaxed.

October 13.

Pensacola:

New cases to-day, 29.
Deaths to-day, 4.
Total cases to date, 383.
Total deaths to date, 52.

The new cases are:

Crencentia Boras, corner Government and Alcaniz.
Leontine Boras, corner Government and Alcaniz.
Miss Ida Rivers, E. Garden.
Miss Nora Daniels, 611 E. Belmont.
Mr. Cross, 528 W. Gregory.
Mrs. Cross, 528 W. Gregory.
Thos. Rauscher, 634 W. Gregory.
Ross Haley, Big Bayou.
E. W. Allen, 10th and DeLeon.
Sam Bosso, 134 E. Chase.
Miss Mamie E. Barr, 1211 E. Jackson.
C. R. Barter, 1314 E. Jackson.
Bob Holley, colored, 811 E. Gregory.
Mr. Lowry, 208 N. ave.
Mrs. H. A. Weathers, 412 N. C. street.
Eva Weathers, 412 N. C. street.
Avy Weathers, 412 N. C. street.
Sophia Edwards, colored, 25 Luke's Alley.
Florence Cunningham, 8 Florida Blanca.
Mattie Cunningham, 8 Florida Blanca.

October 13.—Continued. *Pensacola.*

Joe Touart, 323 E. Government.
D. M. Roach, 323 E. Government.
Dr. Harrison, 510 N. Government.
Ed. Smith, 810 E. Heinberg.
Mrs. McClure, E. Government.
Mrs. McDonald Moyer, E. Intendencia.
Arthur Anderson, 523 E. Gregory.
Miss Mattie Hodges, 811 DeLeon.

The deaths to-day are:

Ed. Caffroe, colored, 608 Aragon.
Jim Varago, 10th and Salamanca.
G. C. Hardy,
J. I. Stephens, S. Palafox.

Fumigating force in Pensacola increased to 100 men. Dr. Porter informs Mayor Bliss that permission to use State's money is upon condition of getting support of citizens of Pensacola.

Elsewhere:

Louisiana:

New Orleans reports 25 new cases, 4 deaths.
Lake Providence and vicinity, 3 new cases.
Paterson, 4 new cases, 2 deaths.
Donaldsville, 1 new case.
Amelia and Bayou L'Ourse, 7 new cases.
Kenner, 4 new cases.
Union Plantation, Iberville Parish, 1 new case.

Mississippi:

Natchez, 4 new cases.
Vicksburg, 8 new cases.
Gulf Port, 3 new cases.
Roxie, 1 new case.
Hamburg, 1 new case.
Port Gibson, 2 new cases.
Rosetta, 1 new case.

Georgia extends quarantine to include portion of Alabama.

October 14.

Pensacola:

New cases to-day, 11.
Deaths to-day, 1.
Total cases to date, 394.
Total deaths to date, 53.
Temperature: max. 76 deg., min. 63 deg., mean 69 deg.
The new cases to-day are:

W. B. Smith, colored, 315 N. Reus.
Henry Rogers, E. Gregory.
Joe Brock 12th and Salamanca.
Bill Daniels, 611 E. Belmont.
Mrs. W. J. Hamn, 412 E. Cervantes.
Mrs. F. Geri, E. Church.
Arthur Reed, 512 W. Wright.
Mr. Liger, 7 E. DeSoto.
Miss Alice McClellan, 506 N. 9th ave.
Alberta Vermillion, 625 E. Heinberg.
John Williams, 814 DeLeon.

October 14.—Continued. *Pensacola.*

The deaths to-day:

M. E. Gross, 538 W. Gregory.

Dr. Porter officially requests City Health Officer Pierpont to request in most emphatic terms that all physicians report immediately, by 'phone, to the State Board of Health, all cases of fever which cannot be positively excluded as yellow fever, also all cases of yellow fever.

Elsewhere:

Louisiana:

New Orleans reports 19 new cases, 5 deaths.

New Iberia, 1 new case.

Grand Isle and Cheniere Caminida, 6 new cases.

Paterson, 6 new cases.

Mississippi:

Natchez, 3 new cases.

Vicksburg, 1 new case.

Port Gibson, 3 new cases, 1 death.

Rosetta, 1 new case.

Gulf Port, 1 new case.

October 15.

Pensacola:

New cases to-day, 16.

Deaths to-day, 2.

Total cases to date, 410.

Total deaths to date, 55.

The new cases to-day are:

Jas. H. Casswell, 412 Olive.

Roy Dukes, 800 Aragon.

Mrs. John Beck, 800 Aragon.

Ernestine Van Metre, 701 W. Main.

Jno. H. Cheatham, 207 N. Devillier.

Louis H. Joh, 214 S. Alcaniz.

Henry Booske, 618 Salamanca.

Lena Mack, 413 N. Reus.

Ethel Sellars, 212 E. Gregory.

Bessie Williams, 20 E. LaRue.

Kate Connor, 321 E. Zaragossa.

Ralph Johnson, colored, corner Jackson and B.

Geo. W. Pryor, New City.

Mrs. Amos, 319 W. Garden.

Arthur Moln, 600 E. Wright.

H. C. Stringfield, Goulding.

The deaths to-day are:

Miss Mattie Hammac, St. Anthony's Hospital.

Selding Stelio.

Temperature: max. 74 deg., min. 68 deg., mean 71 deg.

Elsewhere:

Louisiana:

New Orleans reports, 9 new cases, 3 deaths.

Hanson City, 4 new cases.

New Iberia, 1 new case, 1 death.

Tallulah, 2 new cases.

Mississippi:

Vicksburg, 4 new cases, 2 deaths.

In country, 2 new cases.

Natchez, 7 new cases, 1 death.

October 16.

Pensacola:

New cases to-day, 7.

Deaths to-day, 7.

Total cases to date, 417.

Total deaths to date, 57.

The new cases to-day are:

Emanuel Johnson, 316 E. Romana.

Mrs. Braswell, 810 W. Jackson.

Mrs. W. E. Roland, 806 W. Gregory.

Diomande Poliollo, corner Tarragona and LaRue.

Albert Marassa, 217 N. Reus.

Mrs. Matilda Carroll, 600 Salamanca.

The deaths to-day are:

Mrs. Amos, 400 N. Hayne.

Ethel Sellars, 212 E. Gregory.

Temperature: max. 82 deg., min. 65 deg., mean 74 deg.

Drs. Herron and Phillips arrested for not reporting cases of yellow fever as City Ordinance requires.

Elsewhere:

Louisiana:

New Orleans reports 15 new cases, 3 deaths.

Amelia and Bayou L'Ourse, 3 new cases.

New Iberia, 1 new case.

La Fourche Crossing, 1 new case.

Coye Blanche and Belle Ami for week, 13 new cases, 1 death.

Near Plattenerville, 3 new cases.

Terrebonne Parish for week, 13 new cases, 1 death.

Paterson, 1 new case, plantation close by, 7 cases.

Mississippi:

Vicksburg, 1 new case, 1 death.

In country, 1 new case.

Port Gibson, 1 new case.

Gulf Port, 1 new case.

October 17.

Pensacola:

New cases to-day, 13.

Deaths to-day, 5.

Total cases to date, 430.

Total deaths to date, 62.

The new cases to-day are:

Joseph Steele, 121 N. A. street.

Mrs. Lewis, 506 E. 9th street.

H. E. Franklin, 1312 E. 9th street.

Mrs. H. E. Franklin, 1312 E. 9th street.

Utha Franklin, 1312 E. 9th street.

Willie Franklin, 14 W. Gregory.

Jasper Rand, 710 S. Palafox.

Dora Rogers, E. Gregory.

Kathleen Suggs, 1000 DeSoto.

Annie Bell colored, 15 N. Tarragona.

Venetia Johns, colored, 17 Luke's Alley.

Lucy Sherford, colored, 17 Luke's Alley.

The deaths to-day are:

Jasper Rand, 710 Palafox, Reported dead at same time reported yellow fever.

October 17.—Continued. *Pensacola*.

Mrs. D. C. Eitzen, 416 W. Wright.
 Mr. Wall, 530 E. Government.
 Geo. Byrnes, 318 E. Intendencia.
 Annie Bell, 15 N. Tarragona, Reported yellow fever
 on death certificate.
 Temperature: max. 79 deg., min. 69 deg., mean 74 deg.

*Elsewhere:**Louisiana:*

New Orleans reports 5 new cases, 1 death.
 One new case brought into city from Jefferson
 Parish.

Mississippi:

Natchez: 5 new cases.
 Port Gibson, 1 new case.
 Roxie, 1 death.
 Vicksburg, 2 new cases.
 Hamburg, 2 new cases.

October 18.

Pensacola:

New cases to-day, 8.
 Deaths to-day, none.
 Total cases to date, 438.
 Total deaths to date, 62.
 The new cases to-day, are:
 Carter Noll, colored, 512 E. Wright.
 Mamie Ashland, Herron's Wharf.
 Miss Amanda Johnson, 414 E. Main.
 Mary Albritton, colored, City Hospital.
 Lewis Shuttleworth, 101 E. Romana.
 A. J. Murphy, 420 Hayne.
 John Cox, 427 E. Zaragossa.
 Mrs. J. N. Barlow, 608 E. Wright.
 Temperature: max. 82 deg., min. 68 deg., mean 75 deg.
 Dr. L. C. Phillips fined \$25.00 for failure to report cases
 of yellow fever.

*Elsewhere:**Louisiana:*

New Orleans reports 5 new cases, no deaths.
 Kenner, 1 death, 2 new cases.
 Near Platenville, 1 death.
 Paterson, 2 new cases.
 Near Lafayette, 3 new cases.
 Cheniere Caminida, several new cases. 2 deaths.
 Grand Isle, several new cases.
 Lake Providence, 2 new cases.
 Baton Rouge, 1 suspicious case.

Mississippi:

Near Vicksburg, 1 new case.
 No new cases at Natchez.

October 19.

Pensacola:

New cases to-day, 7.
 Deaths to-day, 2.
 Total cases to date, 446.
 Total deaths to date, 64.

October 19.—Continued. *Pensacola*.

The new cases to-day, are:

Rosa Montgomery, colored, New City.
 John Kendrick, 515 W. Government.
 Dan Murphy, Jr., 420 Hayne.
 Arthur Quina, 105 S. Florida Blanca.
 Mrs. Fredk. C. Humphreys, 321 E. Romana.
 Mr. Schilston, 625 W. Gregory.
 John Williams, colored, 512 W. Zaragossa.

The deaths to-day are:

Chas. Touart, 401 E. Intendencia.
 John Cox, 427 E. Zaragossa.

Temperature: max. 80 deg., min. 69 deg., mean 74 deg.

*Elsewhere:**Louisiana:*

New Orleans reports 8 new cases, no deaths.

Mississippi:

Natchez, 6 new cases.
 Vicksburg, 7 new cases.
 Roxie, 1 new case.
 Hamburg, 1 new case, 1 death.

October 20.

Pensacola:

New cases to-day, 12.
 Deaths to-day, none.
 Total cases to date, 458.
 Total deaths to date, 64.
 The new cases to-day, are:
 Mrs. Collins, 820 DeLeon.
 Edith Collins, 820 DeLeon.
 Thos. Sikes, Jr., 304 E. Government.
 Thos. Rivers, E. Garden.
 Miss Annie Moon, 104 E. Belmont.
 Miss Lydia Rabb, St. Anthony's Hospital.
 Mrs. Sawyer, 12 S. Devillier.
 Mrs. Geiger, 710 W. Gregory.
 Baby Geiger, 710 W. Gregory.
 J. N. Barlow, 608 E. Wright.
 Mrs. H. C. Witt, 806 W. Gregory.
 Florence Byrne, 318 E. Intendencia.
 Temperature: max. 79 deg., min. 57 deg., mean 68 deg.

*Elsewhere:**Louisiana:*

New Orleans reports 4 new cases, no deaths.
 Paterson, 1 new case.
 Lake Providence, 2 new cases.
 Near Jeanerette, 1 new case.
 Franklin, 3 new cases.
 Baldwin, 1 new case.

Mississippi:

Natchez, 1 new case, 1 death.
 Vicksburg, 2 new cases.
 Gulf Port, 1 new case.
 Roxie, 1 new case.
 Hamburg, 1 new case.

October 21.

Pensacola:

New cases to-day, 8.
Deaths to-day, 1.
Total cases to date, 464.
Total deaths to date, 65.
The new cases to-day, are:
Nettie Howard, 111 N. Main.
Mrs. B. Blitch, 707 W. Main.
R. A. Blanchard, 800 Aragon.
Mrs. V. Matronis, 313 W. Romana.
Mart Griffin, 220 E. Gregory.
Eldridge Poiteviant, 226 Florida Blanca.
Mamie Thompson, 510 Inerarity.
Mrs. Paul White, 321 W. Zaragossa.
The deaths to-day:
Baby Geiger, 710 W. Gregory.
Temperature: max. 67 deg., min. 50 deg. mean 58 deg.

Elsewhere:

New Orleans reports 7 new cases, no deaths.

October 22.

Pensacola:

New cases to-day, 16.
Deaths to-day, 1.
Total cases to date, 480.
Total deaths to date, 66.
The new cases to-day, are:
John Creare, Gr. Emergency Hospital.
Susan Barge, colored, Gr. Emergency Hospital.
Belle Daniels, 611 E. Belmont.
Chas. Steele, 121 N. A.
Agnes Steele, 121 N. A.
L. B. Nobles, 4 S. DeVillier.
Frank Parise, 535 E. Zaragossa.
Fred Prytz, 100 S. Florida Blanca.
Lilly Dowling, 207 N. DeVillier.
Miss Mira Rivers, 532 E. Garden.
R. C. Moore, Over Citizens' Bank.
Earle Belle, 326 E. Romana.
Mr. Mosely, 404 E. Wright.
Ed. Farina, 206 W. Zaragossa.
F. C. West, corner Main and Alcaniz.
C. F. Leah, 513 N. 6th Ave.
The death to-day was:
Joseph Steele, 121 N. A.
Temperature: max. 69 deg., min. 47 deg., mean 58 deg.

Elsewhere:

New Orleans reports 2 new cases, no deaths.

Mississippi:

Vicksburg, 3 new cases, 1 death.
Natchez, 2 new cases in city, 1 in country.
Roxie, 1 new case.

Texas lifts quarantine against all points in Louisiana, except those that are infected.

October 23.

Pensacola:

New cases to-day, 7.
Deaths to-day, 1.
Total cases to date, 487.
Total deaths to date, 67.
The new cases to-day, are:
Antonio Portativite, 400 W. Belmont.
Ethel Pyritz, 100 S. Florida Blanca.
Eugene Cartlage, 613 Salamanca.
Bessie Johnson, 414 E. Main.
Nellie Roland, 806 W. Gregory.
Allie Roland, 806 W. Gregory.
Cora Reed, 512 W. Wright.
The death to-day:
(Name not reported.)
Temperature: max. 70 deg., min. 50 deg., mean 60 deg.

Elsewhere:

New Orleans reports 4 new cases, no deaths.

Mississippi:

Gulf Port, 1 new case.
Vicksburg, 1 new case in city, 2 in country.
Natchez, 2 new cases in city, 1 in country.
Hamburg, 1 new case.

Alabama raises quarantine for northern half of State.

October 24.

Pensacola:

New cases to-day, 9.
Deaths to-day, 1.
Total cases to date, 496.
Total deaths to date, 68.
The new cases are:
Alex. Whitehall, 624 E. Garden.
F. B. Touart, 108 S. Florida Blanca.
Mrs. Eugene Arbona, 49 E. Chase.
Francis Pyritz, 100 S. Florida Blanca.
W. G. Pyritz, 100 S. Florida Blanca.
R. Shuttleworth, 101 E. Romana.
Laura Bell, Shuttleworth, 101 E. Romana.
Mrs. C. M. Sweeney (address not given).
Philip Albaugh, St. Anthony's Hospital.
The death to-day:
Mr. Carswell.
Temperature: max. 76 deg., min. 56 deg., mean 66 deg.

Elsewhere:

New Orleans reports 4 new cases, 2 deaths.

Mississippi:

Natchez, 1 case.
Roxie, 1 case in country.

Mexico:

Omealca, 2 cases.
Tuxtepac, 2 new cases.
State of Vera Cruz, 1 case.

Georgia removes all quarantine restrictions.

October 25.

Pensacola:

Cases to-day, 8.
Deaths to-day, 2.
Total cases to date, 505.
Total deaths to date, 70.
The new cases to-day are:
T. Mattieson, Fisherville.
Charlie Moyer, 316 E. Intendencia.
C. D. Hase, 431 E. Zaragossa.
Mrs. Lila Luton, 409 Guillemard.
Mrs. Gunn, 319 E. Gregory.
Bessie Lewis, corner Zaragossa and Barelona.
Mrs. C. S. Shaw, Big Bayou.
Mrs. Stearns, 310 N. Alcaniz.
The deaths to-day are:
Mrs. Gunn, 319 E. Gregory.
Mrs. Stearns, 310 N. Alcaniz.
Temperature: max. 79 deg., min. 64 deg., mean 72 deg.

Elsewhere:

New Orleans reports 9 new cases, 2 deaths.
Mississippi calls in all health officers.

October 26.

Pensacola:

Cases to-day, 12.
Deaths to-day, 2.
Total cases to date, 517.
Total deaths to date, 72.
The new cases to-day are:
Miss Genevieve Shuttleworth, 101 E. Romana.
J. W. Gay, 16 W. Gonzales.
Miss Essie Mitchell, 402 E. Belmont.
Cassieus Gritham, colored.
Angelo Mascona, corner Garden and DeVillier.
John Mitchell, 402 E. Belmont.
Mrs. Eubanks, 910 7th ave.
Victor Soderquest, 311 S. Devillier.
Mrs. Elisa Metts, 814 E. Cervantes.
Ed. Hodgeboon, 214 E. Wright.
Alice Francis, corner Zaragossa and Reus.
Mrs. S. C. Donaldson, 401 E. Gregory.
The deaths to-day are:
Antonia Portativite, 700 W. Belmont.
F. C. West, (was overlooked to report some days ago.)
Temperature: max. 64 deg., min. 56 deg., mean 60 deg.
Dr. Andrade leaves Pensacola for Jacksonville.

Elsewhere:

New Orleans reports 3 new cases, no deaths.
Mississippi makes no further reports.
Marine Hospital Service withdraws revenue cutter service patrol, except at Pensacola.
President Roosevelt visits New Orleans.

October 27.

Pensacola:

New cases to-day, 9.
Deaths to-day, 2.
Total cases to date, 526.
Total deaths to date, 74.
The new cases to-day are:
George Farney, 429 W. Jackson.
Green Williams, 131 E. Wright.
Mack Flowers, 913 E. DeSoto.
Alonzo Flowers, 913 E. DeSoto.
Mattie Blossom, 219 Strong.
John Mitchell, corner Zaragossa and Baylen.
Julia Jackson, colored, in rear of 12 W. Wright.
J. D. Kingnary, St. Anthony's Hospital.
Robert Johnson, 812 E. Wright.
The deaths to-day are:
Mr. Olsen, Olivia.
E. F. Cartlage, E. Garden.
Temperature: max. 75 deg., min. 69 deg., mean 72 deg.

Elsewhere:

New Orleans reports 2 new cases, 4 deaths.
Surgeon White writes Surgeon-General Wyman that most of the regular help can now be recalled, as the work is so nearly over.

October 28.

Pensacola:

New cases to-day, 1.
Deaths to-day, 3.
Total cases to date, 527.
Total deaths to date, 77.
The new case to-day is:
Mary Johnson, colored, Leo and 7th ave.
The deaths to-day:
J. D. Kingnary, St. Anthony's Hospital.
Mrs. Paul White, 321 W. Zaragossa.
Mr. Roch secures restraining order to prevent the fumigating of his residence.
Temperature: max. 95 deg., min. 69 deg., mean 72 deg.

Elsewhere:

New Orleans reports 4 new cases, 1 death.

October 29.

Pensacola:

New cases to-day, 5.
Deaths to-day, none.
Total cases to date, 532.
Total deaths to date, 77.
The new cases to-day:
Miss Julia Johnson, 316 E. Romana.
Anna Booske, 619 Salamanca.
Dr. H. J. Wright, Manhattan Annex.
Modeste Cunningham, colored, 31 S. Baylen.
Geo. Harold, colored, corner DeVillier and Gadsden.
Temperature: max. 75 deg., min. 58 deg., mean 66 deg.

Elsewhere:

New Orleans reports 2 new cases, 1 death.

October 30.

Pensacola:

New cases to-day, 6.
Deaths to-day, none.
Total cases to date, 538.
Total deaths to date, 77.

The new cases are:

Mrs. Monk, 16 W. Gregory.
Mr. Kenster, 513 W. Gregory.
Mrs. Perdue, 414 E. Wright.
B. F. Bryan, 1321 N. Davis.
Lloyd Durham, E. Wright,
Infant of E. E. Liger, 7 DeSoto, E.

Temperature: max. 58 deg., min. 44 deg., mean 51 deg.

Elsewhere:

New Orleans reports 4 new cases, no deaths.

October 31.

Pensacola:

New cases to-day, 9.
Deaths to-day, none.
Total cases to date, 547.
Total deaths to date, 77.
Cases for month, 394.

The new cases are:

Effie Butler, 412 E. Belmont.
Malcolm Broughton, corner Gadsden and 6th ave.
Robt. Castle, 412 S. Olivia.
Cordon Castle, 412 S. Olivia.
Walton Danford, 412 S. Olivia.
Wm. Christie, Little Bayou.
G. B. Marassa, 217 N. Reus.
Dr. Fowler Thames, 613 E. Chase.
Mrs. F. M. Butler, 812 N. 7th ave.
Dr. Porter advised by Dr. Sanders of Alabama that
quarantine restrictions against Walton county are
raised.

Temperature: max. 70 deg., min. 58 deg., mean 64 deg.

Elsewhere:

New Orleans reports 3 new cases, 2 deaths.
Total cases to date, 3,396.
Total cases for month, 396.

November 1.

Pensacola:

New cases to-day, 2.
Deaths to-day, none.
Total deaths to date, 77.

The new cases to-day:

Jas. Burns, 907 W. LaRue.
Miss Jennie Maloney, 327 E. Government.
Temperature: max. 72 deg., min. 52 deg., mean 62 deg.

Elsewhere:

New Orleans reports no new cases 2 deaths.

November 2.

Pensacola:

New cases to-day, 3.
Deaths to-day, none.
Total cases to date, 552.

November 2.—Continued. *Pensacola.*

Total deaths to date, 77.

The new cases are:

Moses Thomas, colored, 712 E. Wright.
Willie Douglas, 712 E. Wright.
Gustavus Lambridge, 707 Aragon.
Temperature: max. 64 deg., min. 48 deg., mean 56 deg.

Elsewhere:

New Orleans reports 2 new cases, no deaths.

November 3.

Pensacola:

New cases to-day, 3.
Deaths to-day, 1.
Total cases to date, 555.
Total deaths to date, 78.

The new cases are:

Wm. Ruleff, 1316 N. Davis.
Mr. Faulkner, 313 N. Alcaniz.
Stelemus Teoloos, LaRue and B.

The deaths to-day:

Dr. Fowler Thames, E. Chase.
Dr. Porter goes to New Orleans to see Dr. White.
Temperature: max. 71 deg., min. 55 deg., mean 63 deg.

Elsewhere:

New Orleans reports 1 new case, 1 death.

November 4.

Pensacola:

New cases to-day, 1.
Deaths to-day, 1.
Total cases to date, 556.
Total deaths to date, 79.

The new cases are:

Donald McLellan, Jr., 1314 E. Jackson.

The deaths to-day:

G. B. Morasso, 217 N. Reus.
Temperature: max. 69 deg., min. 59 deg., mean 64 deg.

Elsewhere:

New Orleans report no new cases, 1 death.
Alabama raises quarantine against all places except
Santa Rosa and Escambia counties.

November 5.

Pensacola:

New cases to-day, 1.
Deaths to-day, none.
Total cases to date, 557.
Total deaths to date, 79.

The new case to-day:

Felix Gonzales, 323 W. Chase.
Temperature: max. 77 deg., min. 65 deg., mean 71 deg.

Elsewhere:

New Orleans reports 1 new case, 1 death.
Mexico is reported as being free from yellow fever.

November 6.

Pensacola:

New cases to-day, 3.

Deaths to-day, 1.

Total cases to date 560.

Total deaths to date, 80.

The new cases to-day are:

Mrs. Josephine Quina, 406 E. Intendencia.

Mrs. L. D. Gonzalez, 402 E. Wright.

Miss W. C. Anderson, St. Anthony's Hospital.

The deaths to-day:

Mack Flowers, 913 E. DeSoto.

Temperature: max. 74 deg., min. 67 deg., mean 70 deg.

Elsewhere:

New Orleans does not make any yellow fever report.

November 7.

Pensacola:

New cases to-day, 2.

Deaths to-day, none.

Total cases to date, 562.

Total deaths to date, 80.

The new cases are:

Miss Virgie Thompson, 410 N. D. street.

Lizzie Haynes, 415 E. Romana.

Temperature: max. 69 deg., min. 58 deg., mean 64 deg.

November 8.

Pensacola:

New cases to-day, none.

Deaths to-day, none.

Total cases to date, 562.

Total deaths to date, 80.

Temperature: max. 72 deg., min. 53 deg., mean 63 deg.

November 9.

Pensacola:

New cases to-day, none.

Deaths to-day, none.

Total cases to date, 562.

Total deaths, 80.

Temperature: max. 66 deg., min. 50 deg., mean 58 deg.

Dr. Porter received telegram: two suspicious cases yellow fever in Havana.

Elsewhere:

Immigration and Quarantine Conference convenes in Chattanooga.

November 10.

Pensacola:

New cases to-day, none.

Deaths to-day, none.

Total cases to date, 562.

Total deaths, 80.

Dr. Porter recommends that immunity certificates be required of passengers from Havana to Florida.

Case of yellow fever in Havana confirmed.

Temperature: max. 57 deg., min. 51 deg., mean 54 deg.

November 11.

Pensacola:

New cases to-day, none.

Deaths to-day, none.

Cases under treatment, none.

Total cases to date, 562.

Total deaths, 80.

Temperature: max. 62 deg., min. 48 deg., mean 55 deg.

Dr. Porter issues Bulletin No. 23, removing quarantine restrictions on New Orleans, Louisiana and Mississippi.

Marine Hospital Service advises that on account of lateness of season immunity not be required of passengers from Havana to Florida.

November 12.

Pensacola:

New cases to-day, 1.

Deaths to-day, none.

Total cases to date, 563.

Total deaths to date, 80.

The new cases are:

Tom Mooney, 115 W. Intendencia.

Light frost fell this morning.

Temperature: max. 62 deg., min. 43 deg., mean 52 deg.

November 13.

Pensacola:

No new cases reported.

U. S. Marine Service advises that immunity certificates will be required of passengers from Havana to Florida, as per Dr. Porter's request of the 11th.

November 15.

Pensacola:

New cases to-day, 1.

Deaths to-day, none.

Total cases to date, 563.

Deaths to date, 80.

The new case to-day is:

Miss Sandusky, Goulding.

November 17.

Pensacola:

New cases since last bulletin, November 16, none.

Deaths since last bulletin, November 16, 1.

Cases discharged since last bulletin, 1.

Cases under treatment, 1.

Suspicious cases under observation now, none.

The last death was Miss Sandusky, November 16.

The last case discharged was Tom Mooney, November 17th.

Number cases reported in last ten days, 2.

November 22.

Pensacola:

Dr. Porter and assistants leave Pensacola for Jacksonville.

November 26.

Pensacola:

One new case reported:

Gilbert A. Hobey.

November 6.

Pensacola:

New cases to-day, 3.

Deaths to-day, 1.

Total cases to date 560.

Total deaths to date, 80.

The new cases to-day are:

Mrs. Josephine Quina, 406 E. Intendencia.

Mrs. L. D. Gonzalez, 402 E. Wright.

Miss W. C. Anderson, St. Anthony's Hospital.

The deaths to-day:

Mack Flowers, 913 E. DeSoto.

Temperature: max. 74 deg., min. 67 deg., mean 70 deg.

Elsewhere:

New Orleans does not make any yellow fever report.

November 7.

Pensacola:

New cases to-day, 2.

Deaths to-day, none.

Total cases to date, 562.

Total deaths to date, 80.

The new cases are:

Miss Virgie Thompson, 410 N. D. street.

Lizzie Haynes, 415 E. Romana.

Temperature: max. 69 deg., min. 58 deg., mean 64 deg.

November 8.

Pensacola:

New cases to-day, none.

Deaths to-day, none.

Total cases to date, 562.

Total deaths to date, 80.

Temperature: max. 72 deg., min. 53 deg., mean 63 deg.

November 9.

Pensacola:

New cases to-day, none.

Deaths to-day, none.

Total cases to date, 562.

Total deaths, 80.

Temperature: max. 66 deg., min. 50 deg., mean 58 deg.

Dr. Porter received telegram: two suspicious cases yellow fever in Havana.

Elsewhere:

Immigration and Quarantine Conference convenes in Chattanooga.

November 10.

Pensacola:

New cases to-day, none.

Deaths to-day, none.

Total cases to date, 562.

Total deaths, 80.

Dr. Porter recommends that immunity certificates be required of passengers from Havana to Florida.

Case of yellow fever in Havana confirmed.

Temperature: max. 57 deg., min. 51 deg. mean 54 deg.

November 11.

Pensacola:

New cases to-day, none.

Deaths to-day, none.

Cases under treatment, none.

Total cases to date, 562.

Total deaths, 80.

Temperature: max. 62 deg., min. 48 deg., mean 55 deg.

Dr. Porter issues Bulletin No. 23, removing quarantine restrictions on New Orleans, Louisiana and Mississippi.

Marine Hospital Service advises that on account of lateness of season immunity not be required of passengers from Havana to Florida.

November 12.

Pensacola:

New cases to-day, 1.

Deaths to-day, none.

Total cases to date, 563.

Total deaths to date, 80.

The new cases are:

Tom Mooney, 115 W. Intendencia.

Light frost fell this morning.

Temperature: max. 62 deg., min. 43 deg., mean 52 deg.

November 13.

Pensacola:

No new cases reported.

U. S. Marine Service advises that immunity certificates will be required of passengers from Havana to Florida, as per Dr. Porter's request of the 11th.

November 15.

Pensacola:

New cases to-day, 1.

Deaths to-day, none.

Total cases to date, 563.

Deaths to date, 80.

The new case to-day is:

Miss Sandusky, Goulding.

November 17.

Pensacola:

New cases since last bulletin, November 16, none.

Deaths since last bulletin, November 16, 1.

Cases discharged since last bulletin, 1.

Cases under treatment, 1.

Suspicious cases under observation now, none.

The last death was Miss Sandusky, November 16.

The last case discharged was Tom Mooney, November 17th.

Number cases reported in last ten days, 2.

November 22.

Pensacola:

Dr. Porter and assistants leave Pensacola for Jacksonville.

November 26.

Pensacola:

One new case reported:

Gilbert A. Hobey.

December 4.

Pensacola:

Case reported on November 26th, died.

SUMMARIZED, THE FINAL REPORT STANDS THUS:

Number cases in August.....	4
Number deaths in August.....	1
Number cases in September.....	149
Number deaths in September.....	25
Number cases in October.....	394
Number deaths in October.....	41
Number cases in November.....	25
Number deaths in November.....	4
Number white cases in epidemic.....	525
Number white deaths in epidemic.....	76
Mortality per cent. of whites.....	14.4
Number colored cases in epidemic.....	47
Number colored deaths in epidemic.....	5
Mortality per cent. of colored.....	10.6
Total number cases reported.....	572
Total number deaths reported.....	82
Total mortality of reported cases.....	14.1
Youngest case: infant of L. F. Joh, died age 11 days.	

December 23.

Requirement of immunity certificates, passengers from Havana to Florida, removed. Close inspection continued.

December 24.

Case of yellow fever arrives Galveston from Havana.

December 25.

Case at Galveston from Havana died.

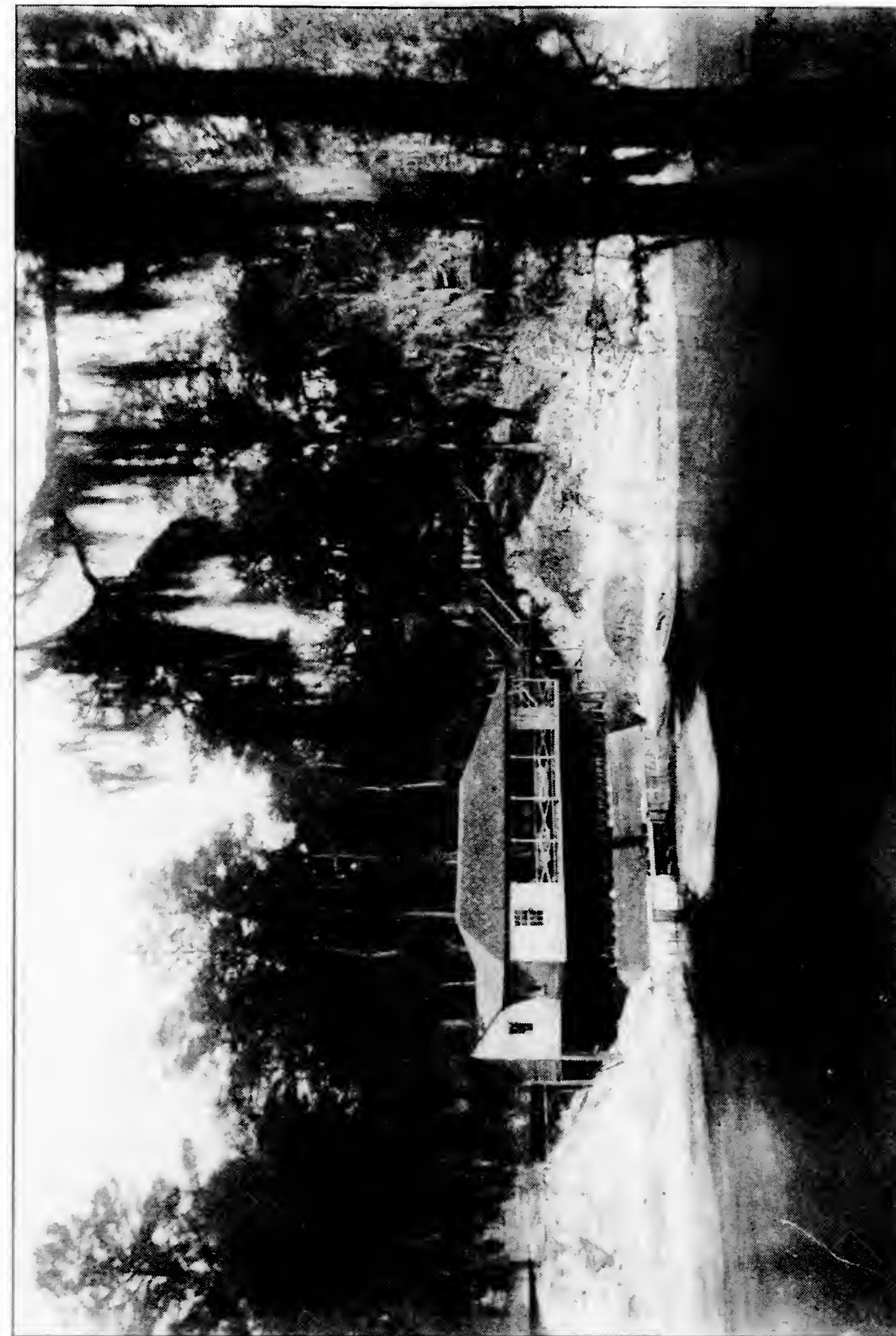
In connection with the Mortuary Statistics, the accompanying map has been prepared by Dr. Byrd, showing the approximate location of the cases of yellow fever occurring in the main portion of the city of Pensacola, with reference to blocks. And while these locations are not absolutely accurate, they are as nearly so as a deal of painstaking effort could get them. An ordinary map of the city was used and figures of three different shapes used to locate the cases occurring in September, October and November, the four cases occurring in the latter part of August, being placed with those of September. The cases occurring at Goulding and on the beach, could not be shown, and a few in the borders of Pensacola proper could not be included without making the map incon-

veniently large and much more expensive. It will be noted that twenty cases were treated at St. Anthony's Hospital, in a large screened ward, and though all the nurses and help were non-immunes, yet not one developed yellow fever. This is mentioned for its bearing upon the Law of Transmission of Yellow Fever by Mosquitoes.

The Florida yellow fever incidents of 1905 cannot well be dismissed without making reference to the source from which the infection was received and which gave the State health authorities so much anxiety and worry in West Tampa and Pensacola, and the people of the State generally good reason for considerable uneasiness. The case of yellow fever at West Tampa was traced directly to New Orleans, and the infection of Pensacola can be presumably attributed to the same source.

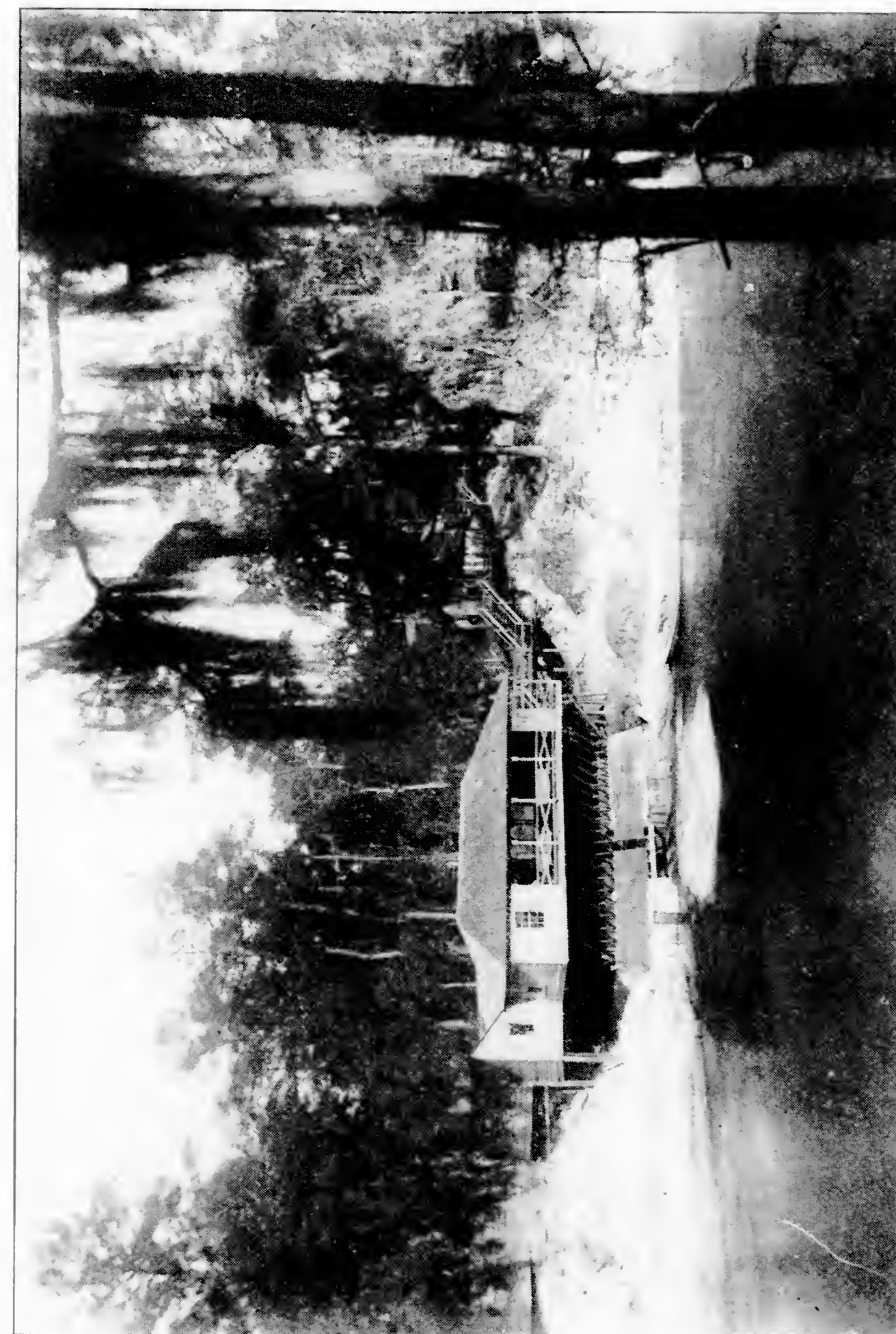
The seeming reluctance of the health authorities of New Orleans to inform neighboring States of unsanitary conditions which existed in that city as early as the twelfth of July and which have since been acknowledged to in published statements when trying to explain and excuse a silence on the subject, is truly remarkable and can hardly be understood from the standpoint of the usual alterness of State health officials and especially those of Louisiana. A failure to give this information to neighboring States and to communities in Louisiana was, to speak mildly, a disingenuous treatment of the health and lives of the Southern Gulf States; likewise, permitting numerous cheap rate excursions, which it is known are always extensively partonized, to visit New Orleans, must be considered to be a culpable wrong imposed upon the people of the entire South. A careful reading of the report of the president of the Louisiana State Board of Health and of the City Health Officer of New Orleans, on the epidemic of yellow fever, its supposed introduction, discovery and early management which are given elsewhere in this paper, will leave no doubt in the minds of thoughtful persons, that even after yellow fever was indisputably proven to exist in New Orleans, and several cases had been communicated to the

authorities, there was apparently a parrying with facts, and an artful play for time and delay, so if there was not a direct effort of concealment of yellow fever at New Orleans, yet by failing to promptly report facts in regard to these cases, a charge of carelessness and indifference to the public welfare is warrantable and excusable. If this is not true, how else can be explained the action of the president of the State Board of Health of Louisiana in writing to the National health authority at Washington and to the health authorities of nearby States instead of telegraphing the information, if not that by resorting to mail communication, with its possible delays, a hope of putting off the "evil day" would be had, before the truth which had finally to be told. It is to be regretted that the same nervous energy and disposition to watch the health affairs of neighboring States, and to "get busy" without sufficient reason, and on mere hypothetical suppositions (which seemed to characterize the past efforts of the State Board of Health of Louisiana in sanitary matters each summer) had not inspired last summer to keep in closer touch with the municipal sanitation of New Orleans, for if Dr. Kohnke is correct in his surmise that yellow fever was introduced into New Orleans as early as May, there would seem to have been ample time and opportunity to discover the disease within two months, and that deaths occurring under suspicious circumstances could have had thorough investigation and not have been ignored and their consideration slurringly dismissed. This was particularly the case when Surgeon Smith of the Public Health and Marine-Hospital Service stationed in the Marine-Hospital in New Orleans, brought specifically to the attention of the State and city health authorities at New Orleans, his findings, after he had personally investigated the Italian quarter of New Orleans. It is quite certain that the general public would have reposed greater confidence in the health officials of New Orleans, and in their ability to meet and control the exigencies of the outbreak, had the announcement of yellow fever in that city been first publicly made by them, and not by physi-



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cians of other States; they were seemingly then forced to acknowledge the truth of the situation. Withholding such vital information from the public, until it could no longer be kept quiet, certainly tended to create a distrust in future methods or management. Very probably, it was because of this lack of confidence in the policy of the State Board of Health and of the city health government of New Orleans and the seeming indifference to the situation displayed by both, which induced the Governor at the demand of a large number of citizens of New Orleans, to request the President of the United States to assume charge of the situation at New Orleans and to place the Public Health and Marine-Hospital Service in active control of sanitary matters in that city.

Whether or not yellow fever was introduced into New Orleans from Belize or Havana, has no bearing upon the question of a moral obligation which rested upon the Louisiana State health officials to promptly notify the public as soon as there was a reasonable suspicion of cases existing in that city. A delay of one or two days in which a careful inquiry into the nature of the sickness might be had so that no hasty or unguarded statement might be made, is an excusable precaution, but the same cannot be said of a silence of two weeks or more, when the infection each day increased in potency.

The evidence, unfortunately, all goes to show that no extended and searching investigation was made after apparently indisputable cases had been located, and the impression gained therefore is that there was more of a disposition to reject and make light of such information than to confirm the same by diligent inquiry into all facts.

The State Health Officer has always heretofore maintained a discreet silence respecting the health management, and refrained from criticism of other States, according the several health officials of each commonwealth an honesty of purpose in all their acts and a conscientious regard for the welfare of the people of not only their own especial jurisdiction but likewise of the

entire country. Therefore, in discussing the manifest absence of any desire to ascertain existing conditions and the course and conduct of the health officials of Louisiana in the recent health disturbance in that State, he has felt warranted in criticising an evident want of frankness and sincerity toward other communities, which was demanded of them by the obligations of the office which both as State and city health officials at New Orleans they had assumed when they accepted those responsible positions. Nowhere in any of the statements of reports from New Orleans can be found a justifiable reason or excuse for the apathetic indifference which seems to have characterized the early administration of the epidemic in New Orleans last summer, and which was so far reaching in its ill effects because of that neglect. These opinions are concurred in by the rest of the South in conspicuous manner, judging from the conclusions reached by the Chattanooga Conference last November, when it seemed to be the unanimous decision of the representatives from Louisiana as well as from the other Southern States that government control of maritime and inter-state quarantines should be assumed by the Marine-Hospital Service, and Congress should be asked to enact the required measures needful to accomplish this end. Not only was the Louisiana delegation insistent upon this request, but it also appears that the President had been solicited to order a permanent detail of Surgeon White at New Orleans, so that the country at large might feel assured and confident that measures considered necessary to maintain a high excellence of health would be provided at New Orleans, and also that neighboring States and State Boards of Health would have due notice of any marked deviation from normal health conditions during the forthcoming season.

The management of the epidemic of yellow fever at New Orleans under the Public Health and Marine-Hospital Service is so generally known in point of excellence, that it is unnecessary to further allude to the subject. But it should not be forgotten that before the transfer of

management from the State and municipality to the Public Health and Marine-Hospital Service, twenty-six parishes in Louisiana had been infected, besides scattering the infection to Mississippi at several points, and also infecting West Tampa and Pensacola, in Florida.

The brilliant achievement of Surgeon White of the Public Health and Marine-Hospital Service, in controlling the situation at New Orleans after he was placed in charge of sanitary matters in that city, is deserving of praise and commendation. Not only were his sanitary forces well organized, but they were also well assigned and a campaign in practical methods for exterminating the propagators of infection and transmitting yellow fever was ably conducted and with equally as successful results as those employed to suppress the disease. His capable discernment of conditions as they arose, and his ability to deal impartially with all classes of citizens without friction, but with firmness, early attracted confidence in his methods of management, and contributed to a victory which was richly deserved, and in the success of which his friends join in hearty congratulations as having been deservedly earned.

In dealing with sickness of a transmissible character, tending to become epidemic, the policy of the State Board of Health of Florida has always been directed, First: To measures tending to confine the disease to the locality disturbed; and Second: To destroy the infection as rapidly as possible within the infected territory. A proper regard to the public health of the State would seem to demand that a protection should be given to the lives and commercial interest of the people living within the infected place, and as regards yellow fever, by restricting communication which to be safely permissible must be limited to persons who are known to have had the disease and therefore are immune. If this practice is followed and strictly carried out, there need be no uneasiness manifested by the State at large, and travel from points in the State outside of the quarantined town, can be undisturbed and free to all persons. The Board

Management
by Surgeon
White at New
Orleans.

The policy of
State Board of
Health in
epidemic
management.

also assists the indigent sick in places which are quarantined, by providing free of all expense hospital accommodations to this class and to itinerants. The Board likewise cooperates with city or town health organizations in measures calculated to destroy the infection of the particular disease under consideration and treatment. For yellow fever, by screening houses and destroying mosquitoes by fumigation and their breeding places by drainage, and a free use of petroleum. This plan of management although apparently simple is not always devoid of vexations, annoyances and opposition but it is believed that if observed in each of the requirements mentioned, with a strict attention to details, is all that is necessary.

Cooperation
received from
railroad and
telegraph
companies.

Closely associated with a successful management of contagious diseases and also an educational enlightenment of the people in sanitary measures, is that cooperative assistance which the State Board of Health of Florida has always received from the several rail and steamship transportation companies in providing free of charge to the Board, means by which the assistants to the State Health Officer and the State Health Officer himself can rapidly move from point to point in the State in times of epidemic prevalence, or when required to investigate special diseases, or reported sanitary nuisances. The generosity of these companies is deserving of thanks from the people of the State, for it is a gratuitous service which is prompted only from laudable motives. Neither the State of Florida nor the State Board of Health have any legal or moral claim upon the transportation companies for a voluntary help of this kind, for the companies are assessed like individuals for the State Health Fund and have therefore a just claim to the services of the Board when needed. It is a pleasure to state, and the State Health Officer does so with much gratification, that not only was the assistance just mentioned freely and cheerfully given during the past summer whenever requested by the State Health Officer, but other cooperative aid was rendered in quarantine management whenever and wherever the necessities of active supervision of

travel was required. It is suggested that a suitable resolution of thanks to the transportation companies be a small but grateful recognition in comparison to the generous and valuable cooperation which the Board has received from these corporations at all times, and especially when, by epidemic prevalence, the commercial interests of the State have been threatened or involved.

The telegraph companies in the State—Western Union and Postal—were likewise very generous in the business relations with the Board, considerably allowing half rates on all messages during the epidemic, addressed to the State Health Officer or sent by him. An appreciation of this courtesy and generosity is here expressed in which it is felt that the Board very gratefully unites.

Early in November the Superior Board of Health of Cuba announced a case of yellow fever in Havana, with two additional suspects of the same disease. Cases increased, but at no time was the number so large that a widespread epidemic was threatened. However, for prudential reasons given because of warm weather and the activity of the stegomyia, it was thought best to advise that restrictions on travel which had been ordered by the Public Health and Marine-Hospital Service soon after the cases were reported at Havana, should be continued until late in December. About the latter part of December the disease slackened in spread, and although there have been several cases from time to time as noticed by the bills of health, still no apprehension is felt that the disease will assume alarming disturbance during the winter months.

Yellow fever
Cuba in 1905.

Dr. R. H. von Ezdorf, Passed Assistant Surgeon Public Health and Marine-Hospital Service, who is attached to the U. S. Consulate in Havana, for supervision of sanitary matters of commercial import between Havana and the United States, very kindly has kept the State Health Officer informed of the exact conditions of health in Havana, especially relating to the outbreak of yellow fever not only in Havana but in the island of Cuba, for there have been quite a number of cases scattered over the island which infection seems to have been distributed

from Havana. In this way the State Health Department has been able to keep somewhat in closer touch with sanitary happenings in Cuba than it otherwise could have done. A summary of the cases divided into periods of 15 days each, with a short account of the origin of the disease in Cuba this past autumn, is given in the Appendix to this report and is interesting reading, particularly that portion which presumes with amazing confidence that supposedly infected mosquitoes brought from New Orleans to Havana in the cabin of steamers, were imprisoned in the hand baggage of immune passengers, when being re-packed prior to going ashore in Havana, and that liberated at the Custom House at Havana during the Customs examination of these articles, the supposedly infected mosquito bit some non-immune persons and this started up the outbreak. This hypothesis is as astounding in conception as is that given by Dr. Finlay in his address before the American Public Health Association at Havana a few years ago when saying that infected mosquitoes probably floated ashore on drift-wood from vessels off the coast and for this way accounted for two cases yellow fever discovered near Santiago. When considering the careful experiments made by Dr. A. H. Doty, the distinguished Health Officer of the Port of New York, on the life of the mosquito, recently given in an article from his pen and published in the "American Journal of Medical Sciences," that mosquitoes do not live longer than thirty hours when confined in baggage or bundles, it is seen how fallacious is the reasoning in assigning such a cause as one accounting for the introduction of yellow fever into Havana during the past fall. Another point in connection with the Havana yellow fever this past year should not be lost sight of: All through the summer an epidemic of dengue prevailed there with a large number of deaths given in the mortuary tables of Havana from this disease. In the United States and in every epidemic of dengue which the State health authorities of Florida have been called upon to observe, while the number of cases have been large—2,000 to 3,000 at Key West in 1898—there

was not a single death; indeed the State Health Officer who has practiced professionally in six epidemics more or less extended in prevalence, does not remember to have ever met with a fatal result from an attack. Therefore, there is good ground for suspicion and doubt which is expressed by Dr. Thomas, the State quarantine officer of Louisiana at the mouth of the Mississippi River, that yellow fever existed at Havana, probably unrecognized, certainly unreported, during the whole season, and that there is good reason to suppose and believe that New Orleans contracted yellow fever from Havana and that the reverse was not the case. There were no quarantine restrictions against Havana imposed by any of the Gulf ports, and Dr. Thomas presents strong circumstantial evidence in support of his supposition. In view of the facts as discussed, and because the sanitary conditions of Cuba, especially those of Havana, are not satisfactory and such as will inspire confidence in future management, it is advised that the Surgeon-General of the Public Health and Marine-Hospital Service be requested to establish a close quarantine against Cuba as early as the 15th of March for the Southern and Gulf ports of the United States, and that every means be instituted and be in readiness to prevent the infection of Florida—Cuba's closest neighbor in the United States—should yellow fever assume a greater prevalence in Cuba during the coming summer.

The Laboratory of the Board continues to increase in the esteem of the medical profession of the State, who are availing themselves more and more of the generosity of the State in maintaining and offering scientific means to determine the nature of disease products and to verify doubtful diagnosis.

The following report of the Bacteriologist of the Board, Dr. Edward Andrade, very entertainingly sets forth the character and amount of bacteriological examinations made in the Board's Laboratory during the past year and other work done of a similar purport.

Laboratory of
the State
Board of
Health.

REPORT OF THE BACTERIOLOGIST.

I herewith submit the report of the work done at the Laboratory during the year 1905.

Increase in
number of
specimens for
examination.

The number of specimens examined has been 2,895, an increase of 491 over the number of examinations made during the year 1904. This increase has been chiefly in the number of specimens of suspected tuberculosis of which the Laboratory examined 790 against 564 in the year 1904; suspected malaria of which the Laboratory made 348 examinations against 216 the preceding year; urine of which 358 examinations were made against 115 the year before; and suspected gonorrhea of which 171 samples were examined against 127 in 1904. The miscellaneous examinations comprising feces, tumors, etc., show an increase from 46 to 83.

During the three years of its existence the Laboratory has examined 5,980 specimens. The first year 996, the second year 2,088 and the third, year 2,896.

A detailed statement of the specimens examined in each month and in each city will be found in the appendix to this report.

Bacteriologist
moves to Pen-
sacola during
epidemic.

On September 21, in obedience to orders from the State Health Officer, the Bacteriologist moved to Pensacola, where yellow fever was prevalent at the time. The Bacteriologist took with him some of the most important apparatus and instruments necessary for his work and established temporary headquarters at the private laboratory of Drs. Mallory Kennedy and Clinton D'Alemberte, who generously placed all of their appliances at his disposal. During the five weeks' stay at Pensacola, the Bacteriologist rendered assistance to the health authorities and private physicians in the diagnosis of suspected cases of fever. Though the micro-organism that causes yellow fever is not yet known, the Laboratory examinations can render great service by excluding other diseases that may be easily mistaken for yellow fever in some cases.

October 26, the epidemic at Pensacola approaching its end, the Bacteriologist received orders to return to Jacksonville. During the absence of the Bacteriologist from Jacksonville, Dr. H. S. Holloway, assistant to the Bacteriologist, was left in charge of the Laboratory at Jacksonville, and through his scientific ability and efficient management, it was possible to continue without interruption the usual work of the Laboratory.

Many physicians have failed to observe proper precautions in mailing specimens to the Laboratory. In spite of the fact that the Laboratory furnishes without charge outfits made according to the U. S. Postoffice Regulations and the State Board of Health has established a large number of depots where outfits can be easily obtained without any expense, we frequently receive specimens of tuberculosis sputum and other infectious material, in ordinary bottles wrapped with a thin sheet of paper as the only protection against breakage. I regret to state that often the receptacles are not properly stoppered and the contents of the bottle often leaks out. It can be readily understood that this lack of care entails great dangers not only to the Laboratory force but also to whomsoever may happen to handle the package. Some physicians while making use of our outfits, neglect to see that the receptacles are tightly stoppered and not infrequently on opening our mailing cans, it is found that the suspected material has soiled the blanks and the cotton. We earnestly urge the physicians of the State to be more careful and not to add unnecessary risk to our work.

Precautions to
be observed in
mailing

It is likewise to be regretted that the senders of specimens frequently neglect to place sufficient postage on the outfits; so it happens that specimens are, on this account, detained at the postoffice for several days. Therefore, we are not responsible for delays due to this cause and we hope that in the future physicians in their own interest will pay more attention to the matter.

In order to enable the physicians of the State to obtain the result of a bacteriological examination of cases of supposed diphtheria in the shortest possible time, we

Five hours
culture exam-
ination of sup-
posed diph-
theria.

make now besides the usual microscopic investigation of swab-smears, an examination of five hours cultures that permits, in a large majority of cases, a correct diagnosis to be obtained on the same day of the arrival of the specimen at the Laboratory. In a minority of cases, however, it is necessary to wait on the result of the examination of the eighteen hours culture.

It is to be deplored that some physicians persist in releasing their patients before the secondary cultures furnish the proof that the patient has ceased to be infectious. These practitioners rely entirely upon the clinical appearances in determining the length of time the patient should be isolated, notwithstanding the repeated demonstrated instances that virulent diphtheria bacilli may harbor in the throat and nose for days and weeks after the disappearance of the membrane and other clinical manifestations of the disease. Until release cultures from nose and throat are taken in every case of diphtheria, we cannot expect the complete eradication of the disease.

Hydrophobia
in Jackson-
ville.

A few cases of suspected hydrophobia having appeared among dogs in Jacksonville, the Laboratory determined to make an inoculation test to decide beyond any possible doubt whether the disease was really rabies. For this purpose we secured the head of one of the dogs suspected, and with due precautions a rabbit was inoculated with the brain substance of the supposed rabid animal. After fourteen days the rabbit developed the typical signs of hydrophobia. No signs of secondary infection were discovered on post mortem. I take advantage of this opportunity to call your attention to the great difficulties and risks involved in experimental work on animals in our present quarters.

Methods of
diagnosing
hydrophobia.
Frothing-
hams method.

For rapid diagnosis of hydrophobia, we are prepared now to use the method of Dr. Frothingham of Harvard University or that of Dr. Stokes of Baltimore. These methods have the object of demonstrating the presence of the "bodies" discovered by Prof. Negri of Italy, in the cerebrum and cerebellum of hydrophobic animals. Frothingham's method is the following:

1st: Fix small piece of Ammon's horn or cerebellum in Zenker's fluid for four hours.

2nd: Place in 95 per cent. alcohol over night.

Dr. Stokes'
method.

3d: Place in absolute alcohol half an hour.

4th: Place in alcohol and chloroform, equal parts, half hour.

5th: Chloroform for half an hour.

6th: Saturated solution of chloroform and paraffine for half an hour.

7th: Paraffine half an hour and block.

Sections are now made, fixed upon the slides and treated in the usual manner preparatory to staining.

Dr. Stokes makes impressions of Ammon's horn by simply pressing the slide against the cross-section of the horn, taking a fresh surface of horn after each second or third impression. The slide thus prepared is dropped immediately in Zenker's fluid before it has had time to thoroughly dry. It should be fixed here from one-half to two hours though good results may be obtained after fifteen minutes fixation. The steps are as follows:

1st: From Zenker's fluid to water.

2nd: 95 per cent alcohol 5-10 minutes.

3rd: Saturated solution of iodine in alcohol about ten minutes.

4th: 95 per cent. alcohol 5-10 minutes.

5th: Wash in water.

The impressions or the sections are then stained in the following way:

1st: Unna's stain. (a— Unna's alkaline methylene blue one part, water four parts. b—Eosin, Grubler's w. g. 5 per cent. in water. Mix equal parts of a and b.)

2nd: Wash in water.

3rd: Unna's stain 3-5 minutes.

4th: Wash in water.

5th: Differentiate in 95 per cent alcohol.

6th: Absolute alcohol.

7th: Xylol.

During the past year we have had occasion to examine several samples of urine for tubercle bacilli and have had

Tubercle
bacilli.

Typhoid
bacilli.

an opportunity to realize the difficulties attending the differentiation between the tubercle bacilli and the smegna bacillus. The usual criteria of differentiation, viz., the fact that the smegna bacillus is easily decolorized by absolute alcohol while the bacillus tuberculosis is not, and the different shape of the two organisms, are not always to be relied upon. After carefully considering all the facts and the results of our experience, we fully agree with Drs. H. H. Young and J. W. Churchman of Baltimore in the following statement: "It is impossible to distinguish positively between the tubercle and smegna bacillus by any method now known. All those widely tried have proved unsatisfactory in some cases and the few with clean records have been tested too little to warrant any conclusions about them. Moreover, the striking similarity in staining properties between certain members of the smegna group and the tubercle bacillus, make it seem quite likely that it is irrational to suppose that any staining method that applies to one will not, in some instances, apply also to the other." Accordingly, we earnestly recommend that specimens of urine intended for tubercle-bacillus examination should be collected with scrupulous care, disinfecting properly the anterior urethra, drawing the urine by means of a sterilized receptacle.

We have continued the use of the dead culture of typhoid bacilli in performing the Widal reaction, controlling the results in every case with the living culture. So far, the dead culture has given uniformly satisfactory results, showing in some cases even more sensibility than the living culture. We use either the forty-eight hour bouillon culture of typhoid bacilli killed by adding formalin in the proportion of one per cent., or the suspension of bacilli prepared according to Von Ficker's method. This consists in washing off a 24-hours-old-culture of typhoid bacilli on agar with a normal salt solution containing 1 per cent. of carbolic acid and 10 per cent. glycerine. The resulting suspension is filtered through glass-wool after it is tested for sterility. We specially

recommend von Ficker's method as it gives a uniform and homogeneous distribution of the bacilli in the fluid.

Total number of specimens examined in the Laboratory, during the year 1905, 2,896; divided as follows:

Suspected typhoid fever.....	819
Suspected tuberculosis.....	790
Suspected malaria.....	348
Suspected diphtheria.....	265
Suspected gonorrhea.....	171
Urine	358
Miscellaneous specimens.....	104
Water	41
	<hr/>
	2896

TABLE NO. 1.

Number of specimens of suspected typhoid fever in each city and whether positive or negative.

	Negative	Positive	Total
Jacksonville	255	90	345
Tampa	171	123	294
Crescent City	0	1	1
St. Augustine	2	2	4
Carrabelle	0	1	1
Mulberry	1	0	1
Bradentown	1	0	1
Green Cove Springs	1	1	2
Lloyd	2	2	4
Pensacola	12	5	17
Webster	2	1	3
Fort DeSoto	2	0	2
DeLand	0	1	1
Mayport	0	1	1
Lake Butler	1	0	1
Daytona	15	6	21
Fernandina	12	4	16
Tallahassee	16	10	26
Kissimmee	1	1	2
Arcadia	9	2	11
Alachua	1	1	2
Chattahoochee	3	2	5
Apalachicola	8	2	10
Citra	4	3	7
Miami	3	1	4
Fort Pierce	1	1	2
Fort Myers	1	1	2
St. Petersburg	9	3	12
Ocala	9	9	18
Safety Harbor	3	0	3
	<hr/>	<hr/>	<hr/>
	545	274	819

TABLE NO. 2.

Number of specimens of tuberculosis in each city and whether positive or negative.

	Negative	Positive	Total
Jacksonville.....	200	108	308
Tampa.....	184	101	285
Ocala.....	28	15	43
Arcadia.....	3	0	3
Apalachicola.....	4	22	26
Wildwood.....	3	0	3
Daytona.....	6	3	9
Miami.....	1	2	3
St. Petersburg.....	4	2	6
Pensacola.....	10	7	17
Archer.....	3	2	5
Gainesville.....	2	3	5
Fort Pierce.....	3	1	4
Tallahassee.....	2	1	3
Kissimmee.....	4	2	6
Clear Springs.....	0	1	1
Citra.....	1	3	4
Crescent City.....	1	0	1
Key West.....	7	6	13
San Antonio.....	0	1	1
Starke.....	0	3	3
Palatka.....	1	0	1
Enterprise.....	1	0	1
Punta Gorda.....	1	2	3
Lake Butler.....	2	0	2
Bartow.....	1	2	3
Lake City.....	0	2	2
White Springs.....	1	1	2
Welborn.....	3	0	3
Crystal River.....	2	0	2
	478	291	769

TABLE NO. 3.

Number of specimens of Diphtheria in each city and whether positive or negative.

	Negative	Positive	Total
St. Augustine.....	12	3	15
Jacksonville.....	62	42	104
Tampa.....	39	19	58
Miami.....	2	1	3
Pensacola.....	18	6	24
Palatka.....	0	1	1
Fernandina.....	5	3	8
Tallahassee.....	11	7	18
Ocala.....	1	4	5
Callahan.....	0	1	1
Bradentown.....	1	0	1
Orlando.....	3	0	3
Inverness.....	1	1	2
Apalachicola.....	7	3	10
St. Petersburg.....	3	2	5
Gainesville.....	0	1	1
Mayport.....	3	2	5
Carrabelle.....	1	0	1
	169	96	265

TABLE NO. 4.

Number of specimens of malaria examined in each city and whether positive or negative.

	Negative	Positive	Total
Jacksonville.....	108	11	119
Tampa.....	60	0	60
Tallahassee.....	2	0	2
Fort Myers.....	1	0	1
Ocala.....	1	0	1
Pensacola.....	98	32	130
Webster.....	1	0	1
Camp Perry.....	0	1	1
Chattahoochee.....	1	0	1
Lake Butler.....	1	0	1
Kissimmee.....	1	0	1
Punta Gorda.....	1	0	1
Citra.....	2	0	2
Cocoa.....	4	0	4
River Junction.....	1	0	1
Apalachicola.....	6	0	6
Miami.....	3	0	3
Clearwater.....	1	0	1
Starke.....	1	1	2
Welborn.....	1	0	1
Bradentown.....	2	1	3
Daytona.....	2	0	2
Arcadia.....	1	0	1
Green Cove Springs.....	2	0	2
Crescent City.....	1	0	1
	302	46	348

TABLE NO. 5.

Number specimens of suspected gonorrhea in each city.

Jacksonville.....	158
Daytona.....	5
Pensacola.....	4
Citra.....	1
Fernandina.....	1
Punta Gorda.....	1
Apalachicola.....	1
	171

TABLE NO. 6.

Number of specimens of urine examined in each city.

Jacksonville.....	1
Pensacola.....	157
Mt. Dora.....	2
White Springs.....	1

Fort Myers.....	1
Newberry.....	1
Welborn.....	1
Tampa.....	1
	358

TABLE NO. 7.

Number of specimens of Typhoid Fever examined in each month.

January.....	50
February.....	63
March.....	72
April.....	63
May.....	113
June.....	91
July.....	94
August.....	82
September.....	63
October.....	62
November.....	37
December.....	29
	819

TABLE NO. 8.

*Number of specimens of
Tuberculosis examined in
each month.*

January	62
February	83
March	80
April	75
May	59
June	70
July	68
August	41
September	59
October	68
November	60
December	60
	<hr/>
	790

TABLE NO. 9.

*Number of specimens of sus-
pected Diphtheria examin-
ed in each month.*

January	32
February	16
March	16
April	10
May	6
June	7
July	6
August	14
September	18
October	45
November	50
December	45
	<hr/>
	265

TABLE NO. 12.

*Number of miscellaneous
specimens (feces, milk,
tumors, etc.,) examined in
each city.*

Jacksonville	66
Tampa	13
Gainesville	4
Key West	2
Ocala	2

TABLE NO. 10.

*Number of specimens of
malaria examined each
month.*

January	8
February	11
March	18
April	16
May	21
June	17
July	23
August	28
September	96
October	92
November	16
December	3
	<hr/>
	348

TABLE NO. 11.

*Number of specimens of
water examined for each
city.*

Jacksonville	15
Tampa	4
Bartow	1
Daytona	1
Miami	1
St. Petersburg	3
Chattahoochee	2
Crescent City	3
Lake City	2
Lithia	2
DeLand	2
Lakeland	1
Welborn	1
Pensacola	3
	<hr/>
	41

Sanford	2
Welborn	2
Webster	2
Orlando	1
St. Petersburg	2
Tallahassee	3
Starke	1
Newberry	1
Crystal River	1
	<hr/>
	104

Veterinary medicine and medication has received due attention from the Executive Office whenever sickness among cattle or other animals has been reported to the State Health Officer. Dr. Chas F. Dawson, the Veterinarian of the State Board of Health, has always been promptly directed to points in the State from which information of suspicious disturbances among animals has been reported, and has rendered assistance by advice or other help as the necessities of the occasion required. The following report from him tells of his work in this direction during the past year:

I have the honor to present my report as Veterinarian to the Florida State Board of Health for the year 1905.

There have been several serious outbreaks of glanders in horses and mules during the year. These have been confined exclusively to the central peninsular portion of the State, and in every case the disease has been shown to have been transmitted to Florida stock by horses imported from the horse raising establishments of the West. Irresponsible horse dealers from the West gather up all the cheap stock, sometimes paying as low as ten to twenty dollars per head, and ship to agents or travel with them. Florida gets her share, as the market is good here for cheap horses. This cheap "stuff," infected with glanders, arrives here in very bad condition and is palmed off on unsuspecting buyers as suffering with "shipping cold." The liveryman or farmer is duped into buying the animal, starts in to cure the "cold" and soon notices that his other animals are sick with the same disease. In the case of his horses, the disease runs along, very gradually getting worse, while in the case of mules he will find his animals dying of the disease in the acute form. As a rule, after the unfortunate owner has lost several animals and exhausted his own patience and that of all the horsemen in his locality, knowledge of the outbreak reaches the health officer and an investigation is requested. Much harm is done by ignorant quacks who abound everywhere in States having no laws regulating the practice of

Report of Dr.
C. F. Dawson
Veterinarian
of the State
Board of
Health.

veterinary medicine. These undertake to cure the cold in some of the cases when the disease apparently is cured, or, in other words heals up spontaneously, the quack gets the credit of curing the disease. Glanders is not considered by those, whose opinion is worthy of attention, a curable disease. It may "dry up" in the horse; but a horse once glandered, is always glandered, and is always to be considered as capable of communicating the malady, not only to other horses and mules, but to man also. It is not, as a rule, fatally rapid in a horse; but is in this animal, a chronic affection, sometimes lasting for years before it becomes general and acute. In man and in mules it runs an acute course, ending fatally in a week or two.

Most of the cases encountered the past year had their origin in a load of wild range horses shipped into Florida from South Dakota. They were mostly in poor condition, and the shipper sold cheap. He began operations at Ocala where he caused the death of about thirty head. Eleven of these showed the disease on inspection, ten showed the disease in its incipency by reacting to the mallein test, and the balance died before my visit. At Coleman and Dade City he left four more cases, besides infecting and causing the death of a very fine mule. At Tampa, where he next stopped, he left eight cases, five of which had died when I reached the scene. Mallein tests made on other stock that had come in contact with these showed them free of the disease. Some of the same lot of horses were afterward sold in St. Petersburg and two of them developed the disease and were destroyed. This one shipment therefore caused a loss of forty-five head of horses and mules, of which there is record. Many more may have died, of which we have no record; it being the practice of some to conceal their losses in farm animals. Fifty per cent. or more of the losses could have been prevented had the original cases been promptly reported to the State Health Officer for investigation.

Forage poisoning is another disease of great importance which appears under manifestations as various as

the cause. In one outbreak near Ocala, over fifty head of cattle were sick at the same time from grazing on a pasture of diseased oats. Several head died before the outbreak could be checked. The disease occurs mostly in horses and is known as "staggers." It is caused by feeding on mouldy grain or hay, and, as is well known, is frequently fatal. Outbreaks of this have occurred in all parts of Florida. It may be said to occur everywhere but prevails in some localities during wet seasons.

Rabies or hydrophobia has existed in Florida during the past year to a greater extent, it seems, than in former years. Near Lake City a hog and six cows died as a result of being bitten by a rabid dog. Investigation showed that no people had been bitten. There have been numerous cases in dogs in Jacksonville but none of these were brought to the attention of the State Health Officer.

Mycotic stomatitis or "sore mouth," was prevalent in West Florida in July, August and September. This was caused by the cattle grazing upon rank vegetation produced by peculiar climatic conditions. Death occurred in some cases from starvation, as the condition of the mouth prevents the animal from eating. Removal from the offending pastures, feeding upon soft feed and the application of astringent mouth washes soon checked the outbreaks.

A serious attack of Texas cattle fever was investigated in some Jersey dairy cattle near Daytona. These cattle had been brought in from New York and promptly came down with the disease as a result of tick infestation. It is now well known that it will not pay to introduce into any southern State adult cattle in the hot months. There is an element of danger in bringing adult cattle into Florida at any season. There is little danger however, in bringing in young cattle during the cooler months and practically no danger in bringing in very young calves. This disease is caused by a germ which somewhat resembles the malaria germ and like malaria, the germ is carried by an insect, the cattle tick. By scientific management cattle can be protectively inoculated against this

disease and will do as well in Florida as elsewhere. This was demonstrated recently in some pure-bred Jersey cattle near Gainesville which I inoculated a year ago. They have had their full quota of ticks since, without showing any evil effects, and they were awarded all the first prizes at the recent State Fair at Tampa.

I take this opportunity to express my appreciation of the courteous treatment accorded me by all the office force.

Respectfully submitted,

CHAS. F. DAWSON,

Veterinarian, State Board of Health.

Clerical work. The clerical work of the Executive Office increases each year in both scope and magnitude of work. The correspondence is daily amplifying in both number of letters received and those requiring answers. The compilation of vital statistics and accounts takes up the entire time of one clerk, and another assistant of like character is kept constantly busy in writing letters and filing correspondence after it has been received and answered.

At the commencement of health disturbances last summer, Mr. Richard L. Durrance, who for five years had been the executive clerk of the Board and confidential secretary of the State Health Officer, suddenly sickened and died. This affliction which was a great calamity, also left the office for a time without active executive supervision, because the State Health Officer was engaged at West Tampa and when relieved from there was suddenly called to Pensacola where he was compelled to remain until late in November. Therefore, it was found necessary to transfer the management of all office affairs from Jacksonville to Pensacola, in order to facilitate business and to give prompt attention to inquiries concerning the details of quarantine supervision. Mrs. Herndone was brought from the Jacksonville office to take charge of

accounts, bills and various other matters of expense connected with the direction of the epidemic at Pensacola and the safe-guarding of the State border, which had rapidly accumulated and which, unless thoroughly looked after, would very soon have caused confusion in final settlement. It is due to the patient and assiduous attention of Mrs. Herndone to this work, which was often carried on to late hours of the night, that at the close of the epidemic the accounts for the quarantine service of the summer were ready for inspection and approval by the President of the Board.

Dr. Hiram Byrd, assistant to the State Health Officer, when relieved from train inspection service at Flomaton, gave valuable assistance to the State Health Officer in looking after the details of office management at Pensacola and which service it is desired to here recognize and express appreciation of. After the close of the epidemic at Pensacola and return to Jacksonville, Dr. Byrd was at the request of the State Health Officer and by direction of the President of the Board, assigned to duty in the office of the Board as first assistant, a position similar in duty to that of Assistant State Health Officer which is provided for in the statute. It is exceedingly gratifying to commend the zeal of Dr. Byrd in sanitary work and his thoroughness in dealing with the details of office supervision.

Under instructions from the Board, in full session on December 19th, a set of rules providing a uniform for the assistants to the State Health Officer and for other employees of the State Board of Health, has been adopted and has been approved of by the President of the Board. These rules and regulations are now submitted for the approval and adoption of the full Board in annual session. (See appendix).

FINANCES.

The wisdom of the objection of the Board to a proposition introduced at the last meeting of the State Legislature to reduce the tax levy for State health purposes

Finances.

was emphasized with much reason and force by the incidents of the past summer, when if the treasury of the Board had not been sufficiently large to meet all demands upon its financial obligations, the Board would have had to borrow money, either from another fund of the State, or through the banks, or been compelled to make a public appeal to the citizens of the State for aid and assistance. The State Health Officer has always contended that a large health fund does not menace an economical administration of public health affairs. The expenditure of this fund is always safeguarded by a strict inquiry of the State Health Officer into the necessity of every claim, a careful supervision of the President of the Board, without whose approval no bill can be paid, and finally by the State Comptroller, who under the authority of the constitution of the state, can scrutinize and reject any monetary demand which he may think in the exercise of his constitutional right, not to be legitimate. A well filled purse is a financial reserve by which difficult straits in any business may be tided over and disaster prevented; this rule applies with equal significance to the management of sanitary matters, where economy and efficiency is maintained by having "ready cash" to pay all bills as they arise, and indifferent service need not be tolerated, nor exorbitant prices yielded to, in a "promise-to-pay" system, which is always costly and exacting.

This question of health finances had been so frequently discussed in every annual report since the organization of the Board in 1889 and the subject has been so dwelt upon and argued, that it would seem to be unnecessary to refer to a topic which might be said to have been talked to a "thread-bare" state, but at almost every session of the State Legislature an effort is made to effect a reduction of the annual tax levy for the support of the State Health Department, which if ever successful will seriously cripple the operations of the Board in an efficient administration of sanitary matters. It cannot be understood why an objection should be raised to an accumulation of funds for health purposes. The money is never in the hands of

the Board to dispose of, except through approved vouchers, which as has already been shown must pass the scrutiny of three officials before payment. Again, the fund while in the custody of the State treasurer, and unused for health purposes, can be rented out, as other State funds are, and thus be a source of profit to the State. It certainly cannot be that the levy is thought to be an oppressive burden upon the people, for the total assessment when distributed pro rata of the State's population would not amount individually to the price on an inferior cigar or a yard of ribbon. It is to be hoped that the lessons of the past summer may not be lost upon the future lawmakers of the commonwealth, when by reason of sufficient money the Board was able to successfully cope with an insidious and dangerous enemy to both life and business interests, especially when considered with the possible embarrassment which would certainly have followed a depleted health treasury. Therefore, with these possible exigencies kept constantly in mind it may be confidently expected that in the future there will be no further attempt to juggle with the vital part of the State Health Department, through a false notion of economy.

The following itemization of expenditures of the year, both current monthly and for extraordinary purposes, such as the management of the fever situation at Tampa, Pensacola, and for safe-guarding the border of the State from invasion by yellow fever from New Orleans and other infected places in Mississippi, is amply explanatory of the object for which money has been paid, to not require any further recital.

Statement of money received upon requisition on the State Comptroller, showing amount of the requisitions, amount expended by the Board to meet current expenses, and the amount returned to the Comptroller, together with vouchers in settlement of each month's account respectively:

MONTH	Regular Requisition	Special Requisition	Expended	Returned to Comptroller
January	\$2,500 00		\$2,330 41	\$169 59
February	2,500 00		2,467 60	32 40
March	2,500 00		2,487 99	12 01
March		\$ 994 08	994 06	
March		2,082 00	2,082 00	
April	2,500 00		2,484 68	15 32
April		1,548 36	1,548 36	
May	2,500 00		2,488 57	11 43
June	2,500 00		2,488 13	11 87
June		2,198 21	2,198 21	
July	2,500 00		2,493 81	6 19
August	2,510 00		2,501 23	8 77
August		1,300 23	1,300 23	
September	2,500 00		2,418 95	81 05
September		1,010 18	1,010 18	
October	2,500 00		2,053 08	446 92
October		649 75	649 75	
November	2,500 00		2,448 77	51 23
December	2,500 00		2,498 48	1 52
December		781 75	781 75	
	\$30,010 00	\$10,564 54	\$39,726 24	\$848 30
Amount monthly requisitions			\$30,010 00	
Amount special requisitions			10,564 54	
Amount expended by the Board				—\$39,726 24
Amount returned to Comptroller				848 30
Total			\$40,574 54	—\$40 574 54

DETAILED STATEMENT OF EXPENDITURES OF STATE
BOARD OF HEALTH, 1905.

Regular expenditures:	
Per diem and mileage members of Board	\$ 279.20
Salaries and expenses:	
State Health Officer:	
Salary	3,000.00
Expenses, traveling	756.62
Assistants to State Health Officer:	
Salaries	4,751.00
Expenses, traveling	2,283.69
County agents:	
Salaries	2,700.00
Expenses, traveling	25.65
Veterinarian:	
Salary	799.98
Expenses, traveling	188.28
Attorney	575.00
Sanitary Patrol Service:	
Duval county	250.00

Escambia county	900.00
Hillsboro county	500.00
Monroe county	324.00
Maintenance of office:	
Clerical assistance	2,493.07
Office rent, lights, telephones, postage, express- age, office fixtures, and other incidental expenses	2,069.81
Printing, stationery, statistical blanks, record books, etc.	765.88
Telegraph service	239.48
Miscellaneous, insurance, etc.	361.00
Laboratory:	
Salaries	3,162.75
Equipment and maintenance	857.04
Equipment and maintenance of hospitals:	
Duval county:	
Custodian	705.00
Extension and repairs	649.75
Maintenance	1,457.13
Dade county:	
Custodian	120.00
Expenses	10.00
Escambia:	
Custodian	300.00
Repairs and furnishings	305.50
Maintenance	84.16
Hillsborough:	
Custodian	220.00
Improvements	47.56
Maintenance	473.62
Monroe:	
Custodian	120.00
Other expenses connected with suppression of Variola	
Vaccine, antitoxin, tetanic serum, disinfectants, and medicines used with the indigent	5,902.73
	2,048.34
Total expenditures	\$39,726.24

STATE BOARD OF HEALTH.

STATEMENT DISBURSEMENTS ACCOUNT OF YELLOW FEVER, 1905.

Expenditures on account of yellow fever in West Tampa:

Fumigating and screening, including also coal oil used in extermination of mosquitoes.....	\$ 821.49
Guard service, including expense of arrests and board of parties held under observation	643.88
Office rent and equipment.....	20.25
Nursing, medicine, medical attention and supplies furnished yellow fever patients.....	506.26
Livery used in connection with yellow fever investigation.....	117.00
Special remuneration voted to Dr. Bartlett for services rendered during yellow fever prevalence.....	400.00
Total expenditures Tampa.....	\$ 2508.88

Expenditures on account of yellow fever in Pensacola:

Fumigating and screening:	
Dr. S. R. Mallory Kennedy....	705.00
Dr. Clinton D'Alemberte.....	705.00
(In charge of the work.)	
Labor, chemicals and other expenses connected with fumigating and screening.....	12,823.68
Circum-urban guard service	10,916.10
Intra-mural guard service.....	1,360.00
Livery in connection with investigation of yellow fever	820.50
Office rent	252.50
Hotel bills of Dr. Porter, Dr. Byrd, Dr. Andrade, and Mrs. Herndone.....	736.35
Office equipment, extra stenographic work, etc.	485.05
House to house inspection.....	219.60
Nursing and supplies furnished yellow fever patients	12.30
Dr. J. Whiting Hargis, Special Assistant to State Health Officer	355.00
Special remuneration voted Dr. Anderson by State Board of Health	800.00
Total expenditures Pensacola.....	\$30,191.08

Expenditures on account of yellow fever State at Large:

diem, mileage, members of Board....	161.50
Train inspection service.....	7,306.92
Printing, stationery, etc.,.....	220.75
Telegraphic service, (half rate was kindly allowed by Western Union and Postal Telegraph Co.s).....	1,140.49
Construction and maintenance of Detention Camps:	
Camp Durrance	1,319.28
Camp Evergreen	133.86
Camp Perry	444.30
Extra Office expenditures	628.46
Total expenditures for State at Large	\$11,355.56

Total expenditures on account of yellow fever 1905 \$44,055.52

Through the courtesy of State and city health officials of neighboring States and cities, who were engaged in protective measures against yellow fever introduction, the following information relative to expenses and expenditures has been kindly furnished and will no doubt be interesting to the public of Florida, especially in comparing the cost of quarantine measures and the management of yellow fever in West Tampa and the epidemic of the disease at Pensacola:

State of Louisiana.....	\$354,000.00
State of Mississippi.....	43,220.28
State of Alabama.....	40,000.00
State of Tennessee.....	11,000.00
City of Memphis, Tenn.....	32,300.00
City of Savannah, Ga.....	5,000.00
City of Augusta, Ga.....	2,793.43
City of Mobile, Ala.....	1,332.38

RECOMMENDATIONS.

At the last annual meeting of the Board certain suggestions for the improvement of the health service were made, and being approved of, the attorney of the Board was requested to frame suitable "bills" in this direction

Recommendations.

to be presented to the forth-coming Legislature for enactment. The measures proposed tended towards economy and a more efficient administration of the sanitary code, and were really necessary in view of the increased scope of work which the Board by enlarging its functions under the law, had undertaken to perform. Unfortunately, these propositions when submitted were opposed and defeated in committee of the lower house, not so much it is thought, by the impracticability or undesirability of purpose sought to be attained, but by the reason of the unfriendliness of the chairman of the Public-Health Committee of the House towards the State health organization. The events of the past summer fully demonstrated the necessity for an Assistant State Health Officer, who could supervise the sanitary interests of the eastern portion of the State while the State Health Officer was wholly occupied in the western portion of the State in an effort to prevent a disease dangerous to life and damaging to business interests from spreading to other portions of the State, as well as in an endeavor to suppress and exterminate the disorder at the point where it had effected an entrance. The primal organic law of the State Health Department provides for an Assistant Health Officer, but the compensation provided for such an official seems to contemplate an interrupted service and no physician possessing the experience and intellectual requirements demanded by the State, has yet been found willing to accept the position on the terms prescribed by law. To be of any material assistance in the health work of the State, the Assistant State Health Officer must be available for duty at all times and should be a salaried officer of the Board and the Board should be permitted to enter in contract for the service, precisely as the Army, Navy and Marine-Hospital Services are allowed to do, after a required examination into the fitness of the proposed appointee.

The recommendations therefore, which were made in the last Annual Report, are renewed.

For the past three years it has been both a sad and a pleasant duty to speak of those who, having performed their obligations to their fellowmen, and labored arduously in the field of sanitary science, have laid down the burden of life and joined the great invisible majority.

These fellow-workers of the State Board of Health, although having passed from sight, are yet dear to memory, and as each season rolls round, the recollection of their deeds of love and for humanity, as well as many personal and individual attributes, returns with ever freshness of fragrant remembrance. It is a pleasure to think of our departed friends, and to call up in memory's mirror their characteristics of form and habits, and particularly when we can bear testimony to their mental and moral worth while in the flesh.

Scarcely had the boom of the first gun announcing the commencement of a battle in sanitary warfare with which the forces of the State Board of Health were to be engaged for four long months, died away, and the smoke of apprehensive fear had not yet cleared, when without seeming warning and with a quickness which was appalling the hand of death was placed upon a valued associate in the health office of the Board. Mr. Richard L. Durrance who had since 1901 been the Executive Clerk of the Board, was suddenly stricken with appendicitis Friday evening, August the 4th, and succumbed to the disease on Monday noon the seventh of the month. Just prior to this seizure—which was the second warning of the kind—he had been hard worked with the executive duties of the office, for the State Health Officer who was engaged at Tampa with the imported case of yellow fever from New Orleans, could render no assistance in this direction, and therefore, the entire care of the office with its many difficulties, worries and perplexities were thrown completely on him. Working day and night, and on several occasions, the entire night, his physical condition was not equal to the strain and the weakest point yielded to the unusual nervous tension placed upon it.

Mr. Durrance was a conscientious and faithful assist-

Necrology
1905. Mr. R. L.
Durrance.

ant, ever ready to meet all demands upon his time and endurance. Capable and efficient in the transactions of his office, he carried with him the love and esteem of the members of the Board and that respect which always accompanies a duty well done.

To the State Health Officer, Mr. Durrance occupied a position of trust such as rarely given, and as the State Health Officer's private secretary he enjoyed to the fullest extent a degree of confidence for his integrity and honesty of purpose, which had ample evidence in the assignment of delicate tasks and honorable missions.

As an Executive Clerk he was assiduous in his duty, careful in every detail of work requiring his personal supervision, courteous to all, faithful and loyal to the State and to the service in which he was engaged.

As a friend and companion, he was ever ready to spare others many anxieties and worries at the expense of his own time and strength. To this special phase of his character the State Health Officer wishes to bear testimony and acknowledgment of a loving and grateful remembrance of his many acts of kindness, self-denial and attachment.

The shock of his death was so sudden, coming without previous warning, that the finger of God seemed hardly to have been laid upon him, so light was the touch, and noiseless the summons, when the light of his young life was extinguished, and a manhood which held forth so much of promise and hope suddenly came to an end. To his many associates in Jacksonville, the notice of his sickness was simultaneous with the announcement of his death. He was the first hero of the epidemic year of 1905 and met his death unflinchingly, and in the full discharge of his duty.

On several occasions, the State Health Officer, who has held this responsible and honorable position since the organization of the Board in 1889, has resigned, and has urged the Board to accept his resignation and appoint his successor, but the Board has always refused to accede to the request of Dr. Porter and he has been persuaded here-

Resignation of
Dr. Porter as
State Health
Officer.

tofore to withdraw the appeal for relief. However, on October 12, of last year he wrote to the President of the State Board of Health as follows:

Executive Office State Board of Health of Florida.
Pensacola, Florida, October 12th, 1905.

To the Hon. E. M. Hendry,
President of the State Board of Health of Florida,
Tampa, Florida.

Dear Sir:

I herewith tender to the State Board of Health, through you, my resignation as State Health Officer, to take effect immediately upon the close of the epidemic of yellow fever in this place. I respectfully ask that you will take this matter up with the other members of the Board of Health, with a view of selecting my successor, so that I may turn over the office to him as early as possible. I have carefully and seriously considered the step which I have taken and candidly believe that the office of State Health Officer should be filled by a younger and more active man. I am advancing well toward the sixties, and having served the State conscientiously, and as I believe faithfully, I think I have earned a release from the severe and exciting cares which necessarily are attached to the office of State Health Officer. My service under your presidency has been exceedingly pleasant and enjoyable and the severing of our official relation is the chief regret that I experience in handing you this letter.

Very truly,

(Signed) Joseph Y. Porter,
State Health Officer of Florida.

To which the President of the Board replied as follows:

Executive Office State Board of Health of Florida.
Tampa, Florida, October 15th, 1905.

Dr. Joseph Y. Porter,
State Health Officer of Florida,
Tampa, Florida.

Dear Doctor:

I have your letter of October 12th in which your resignation as State Health Officer of Florida is tendered to the State Board of Health, effective immediately upon the close of the epidemic of yellow fever now in Pensacola, requesting me at the same time, to take the matter up with the other members of the Board, with the view of selecting your successor in order that the affairs of the office of State Health Officer may be turned over to him as early as possible.

Your resignation, Doctor, will be received with great regret, not only by the members of the State Board of Health but by the officials of the State generally, and particularly the citizens of the State at large; who not only seem to have most perfect confidence in you as the greatest caretaker of public health, but, I feel, it would be conservative for me to state, there are many thousands of the people of Florida who actually love you as though they were related to you by blood.

I shall, after hearing from you again on the subject, of course, comply with your request with great reluctance, however, and transmit to the other members of the Board your resignation, but unless you have some reason for preferring that it be made public at this time, I would rather hold the resignation in my hands and keep it from the public until such time as the Board of Health could meet, when we all could confer with you and receive the benefit of your views as to your successor. This suggestion is made in the interest of the citizens of Florida, whom you have served so long and so faithfully, and whose welfare will always hold a big place in your heart, believing as I do that it would be much better than to make it public at this time. Besides, I know that the members of the Board, and particularly the writer, would expect to and desire to have the opportunity to make an effort to induce you to withdraw the resignation. Besides, I am not able to promise just what steps to this end many of the influential citizens of the State will desire to take.

In conclusion, permit me to assure you, that your kindly expressions as to the pleasant and enjoyable relations with the Florida State Board of Health, over which I have had the honor to preside for the past five years, are greatly valued and deeply appreciated. Wishing you every success in your new fight against yellow fever epidemic in Pensacola, and with very warmest personal regards, I beg to remain,

Very respectfully,

(Signed)

E. M. Hendry,

President State Board of Health.

Complying with the request of the President of the Board, no further mention was made of this action on the part of the State Health Officer, until the 19th of December, when the Board had a specially called meeting in Jacksonville to consider the resignation and also to receive a report of the State Health Officer on the expenditures incurred in dealing with yellow fever, its preven-

tion, exclusion and suppression in the State during the four months of the year 1905.

The Board considered the resignation of the State Health Officer, consuming the greater portion of the day in discussing the subject in all of its bearings, and finally refused to accept the same, and passed the following resolutions:

"WHEREAS, Dr. Joseph Y. Porter, State Health Officer of Florida, has tendered his resignation to the State Board of Health; and

WHEREAS, the conditions now affecting the public health of the State of Florida and other Gulf States, involving as they do the danger of a recurrence of yellow fever, during the ensuing summer, make Dr. Porter's continuance in office a public necessity; and

WHEREAS, The confidence of the people of this State in the security and preservation of the public health depends upon their reliance on Dr. Porter's assiduous care and progressive scientific methods; now therefore be it

Resolved, by the State Board of Health, That acting upon Dr. Porter's resignation be deferred and that he be earnestly requested to withdraw the same."

In addition to the above, the State Board of Health adopted the following resolution which will be greatly appreciated by the people of the State:

"*Resolved*, That the members of the State Board of Health of Florida extend to the State Health Officer, Dr. Joseph Y. Porter, their cordial and sincere appreciation of his long and devoted work during the past summer in the management of the yellow fever which prevailed in this State.

"The discovery of a case of yellow fever at Tampa gave him an opportunity to demonstrate his energy, firmness, tact, and scientific knowledge, which the people of this State have learned by experience to expect of him.

"His devoted and assiduous attention to the conditions in Tampa resulted in a noteworthy success. Not a single case spread from the one which had been

imported into that city, thus demonstrating for the first time in the United States the soundness of the law of the transmission of yellow fever by the mosquito. The results in Tampa again justified the confidence of the Board and the people of this State in Dr. Porter's management of the public health service.

"Late in the summer, the introduction into Pensacola of a number of cases of yellow fever from points beyond the State gave rise to an epidemic of yellow fever, which again called for the high executive qualities and scientific knowledge which Dr. Porter possesses. For several months his work was continued without cessation day and night in the interest of the public.

"Under the trying circumstances, without aid or intervention of the Federal Government, Dr. Porter conducted a successful warfare against the disease, which resulted in its extermination before the first frost. The members of the State Board of Health feel not only a peculiar sense of obligation for Dr. Porter's unselfish devotion to the work of the State Board of Health and the public interests, but a sense of pride and satisfaction that the organization which has been the result of years of thought and work on the part of Dr. Porter, proved sufficient in itself to meet this emergency without obstructing or affecting traffic and business in other parts of the State.

"It is gratifying to the members of the State Board of Health to feel that the people of the State unanimously appreciate and value Dr. Porter's work, as do the members of this Board. It is believed that the sentiments of the people of the State of Florida are fully expressed by the following letter from the Governor of the State of Florida to the President of this Board:

State of Florida, Executive Department.
Tallahassee, Florida, December 18, 1905.

Mr. E. M. Hendry,
President State Board of Health, Tampa, Florida.
Dear Sir:

I regret that you got away without my seeing you again. In regard to the matter of the State Health Officer which was mentioned by you, I will say that I feel that the State of Florida has

been very fortunate in having Dr. Porter in the position of State Health Officer for so many years; his successful work in Pensacola and Tampa during the present year goes to show that he is up to date, and that he is as great as the greatest of men in his line.

I congratulate the State Board of Health upon their splendid work during the present year, and I feel that the people of Florida fully appreciate the splendid work rendered by the State Board of Health, and by the State Health Officer and his aides. I am sure that no more competent corps grace official positions of similar character in any other State in the Union.

With best wishes for another successful year's administration, I beg to remain,

Yours very truly,
(Signed) N. B. Broward,
Governor.

"The members of this Board extend to Dr. Porter their personal, as well as their official, thanks and appreciation for his summer's work and trust that the public will long continue to enjoy the services of one whose work they can ill afford to spare."

While the State Health Officer deeply appreciates the kindly sentiments and feelings entertained for him by each and every member of the State Board of Health, and for the work accomplished, and expresses his heartfelt gratitude for the handsome exhibition of trustful confidence which the resolutions of the Board indicate, yet he is still of the opinion that the interests of the Health Service of the State will be better served by having a younger and more active man in the position which he has held so long and which, because of this length of service, he thinks is now entitled to be relieved from. The State Health Officer does not wish to be thought as unnecessarily urgent or hasty in his demand for acceptance of his resignation, and as the Board convenes in annual session in February, he hopes that by that time, a successor will be determined upon, when the work of the year being completed and the annual report for 1905 submitted, he can with satisfaction to himself transfer the office to the future State Health Officer of Florida.

This is a fitting time, at the conclusion of the report, and service, for me to thank the members of the State Board of Health, the people of Florida and my friends generally, both in and out of the State, for the manifestations of good will, confidence in my ability to cope with disease dealing agencies, in its different phases and dissimilar modes of attack, and for the cooperation which has usually marked advice and counsel when offered in sanitary matters. The exceptions have been so few to the general rule in this regard, that the opposition coming altogether from an ignorant and prejudiced source, must be considered as trivial and unimportant, and when compared with the universal expressions of esteem and trust in the State Board of Health, which have reached me from letters and utterances by and through the press, are pettish in tone and childlike in fault-finding. From the press of the State, with but one or two exceptions, the State Health Officer has uniformly received fair and kindly treatment, for this complaisant consideration he feels deeply grateful.

He has always tried to separate in himself the individual citizen from the public official and when censured in his official acts, has tried to think that the strictures were directed against the official and not the individual. It is not to be expected that the average citizen or lay-writers of the press can or will always appreciate the motives or the reasons which compel State health officials to do certain things, where apparently because of not being understood, the movements of the citizen are though to be needlessly interfered with, and his freedom restricted. Criticisms are never objected to by Health Officials, when an opportunity is offered to explain the reason for sanitary regulations, especially when discussed without personal abuse and vituperation. Honesty of purpose and a conscientious regard for the obligations of duty, should at least be conceded to those who are placed in such responsible positions to the public, and harsh strictures might be reserved for a time and certainly until after the sanitary disturbance has passed,

when results can be judged of, and the wisdom or folly of management can then be approved of or condemned. Hasty conclusions without properly acquired information when expressed in a condemnation of health management tend neither to inspire confidence in those who take such a stand in any community nor invite respect for them as law abiding citizens, by those living elsewhere in the State or in other States. Thus the effect and injury resulting from a contentious and malacious opposition to the rules and regulations of health boards, is not limited or confined to local issues or results, but is far reaching in determining a reluctance of desirable investors from elsewhere to reside in a community where a spirit of determined opposition is shown to their own good, through fallacious ideas of personal spite and prejudice.

It is to be hoped that "history will not repeat itself" either in a recurrence of epidemic of disease, or the worries and annoyances connected with their management, and that the future State Health Officer may sail smoothly over a sea of such perfect confidence in his ability and discretion from the public of Florida, that neither shoals of distrust nor rocks of captious criticism shall hinder or interrupt the progress of a work instituted for and heretofore vigorously prosecuted in behalf of the welfare of the people of the State.

A weakly infant, whose early years had to be carefully watched and nurtured, and whose very existence hung in the balance for five years against a divided opinion as a State necessity, has grown from a tottering babe to sturdy manhood, needing only hereafter the fostering care of the peoples' representatives to make future growth a determining factor in the State's physical and financial development. This once infant—the State Board of Health—it has been my pleasure to watch grow with yearly increasing strength, and it is with pride that I now surrender to its parents—the people of Florida—the custody of such an important element of the State

government, the care of which it has been a sacred pleasure for me to cherish and protect.

Respectfully,

JOSEPH Y. PORTER,
State Health Officer.

APPENDIX.

BULLETIN No. 1.

Executive Office State Board of Health of Florida
Pensacola, Fla., August 31, 1905.

The following is published as information to those wholesale merchants whose places of business are located within the cordoned district of the City of Pensacola:

Wholesale merchants whose places of business are located within the cordoned district may continue to do business in a wholesale manner. Retail business with the city without the cordoned district cannot be permitted, because inviting too large a number of persons almost constantly within the restricted territory which it is desirable to prevent. By wholesale business is understood the selling of merchandise in wagon, dray or car lots, and not in small quantities, and drays or wagons will be permitted to go into the cordoned district for the purpose of obtaining articles of merchandise in wholesale lots only between the hours of 8 a. m. and 5 p. m. Cars will be permitted to be loaded from wholesale establishments within the cordoned district in the same manner and in the same hours. The driver and helper on drays, wagons or on cars must not go inside of buildings—wholesale establishments—and the employees of these establishments must do the loading from warehouses. Merchants whose places of business are located within the cordoned district can sell out their perishable stock in a wholesale manner, but not by retail.

There are no restrictions on delivering ice, provisions, milk and laundry within the cordoned district.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 2.

Executive Office State Board of Health of Florida
Pensacola, Fla., August 31, 1905.

Dr. Warren E. Anderson, special assistant to State Health Officer, is hereby placed in charge of so much of the cordoned district in the City of Pensacola as relates to the movement of citizens within the cordon, business transactions between wholesale houses and those without the cordoned district, and granting passes to persons to go in or out of this restricted territory. Persons having business relating to the cordoned district should apply to Dr. Anderson.

Drs. Mallory Kennedy and Clinton D'Alemberte will, under direct instructions of the State Health Officer, supervise the screening of houses and fumigating the same to kill any possibly infected stegomyia.

The State Health Officer assumes direct control of management of the quarantine of Pensacola and alone will issue permission for persons to leave the city.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 3.

Executive Office State Board of Health of Florida
Pensacola, Fla., August 31, 1905.

On the night of August 29th, quarantine restrictions were placed against Pensacola on account of the discovery of three cases of yellow fever. This is therefore to warn all persons that leaving the City of Pensacola by rail or by water, without permission of the State Health Officer, is a violation of the quarantine regulations of the State Board of Health which the statutes of the State fully authorize under conditions which now confront the City of Pensacola and the people of the State. Railroad companies are forbidden to sell tickets by rail for any point in Florida, and a cheerful consent has been given to this request. Water transportation companies are forbidden to take passengers from Pensacola to any point in the State and are hereby authorized to register with the State Health Officer on each trip from Pensacola to nearby points or to distant points in the State a list of the personnel of the crew, for inspection prior to leaving the city.

Sail boats are warned not to leave Pensacola for nearby settlements on the sound or river, without permission from the State Health Officer, and all persons are warned that refugeeing from this place to other places in the State will be regarded as a violation of the quarantine regulations of the State Board of Health and offenders liable to arrest and punishment. Sheriffs of the State are requested to arrest refugees from this place, who have not a permission from the State Health Officer, and sequester them under authority conferred on the State Health Officer by the Statutes of the State.

No restrictions will be placed on freight leaving Pensacola, as it is now known that freight of whatever kind will not convey the infection of yellow fever. Bananas from Spanish Honduras or Central American ports are undesirable imports, except under strict quarantine regulations, for mosquitoes show a fondness for this class of fruit and an infected stegomyia may harbor in bunches of bananas and be transported. Even this method of conveying the infected stegomyia is problematical and ordinary freight in bundles or barrels can be very safely transported from places where yellow fever may prevail.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 4.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 1, 1905.

Reports of Cases of Fever, Suspicious or Confirmed as Yellow Fever:

The State Health Officer requests of the practitioners of medicines of the City of Pensacola that they will make immediate reports to his office of all suspicious cases of fever which may occur in their practice as well as all confirmed cases of yellow fever. This information is necessary that a well-directed management may successfully cope with the disease, looking for its eradication from different foci.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 5.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 2, 1905.

Water Patrol of Harbor and Sound:

The water patrol of Pensacola Bay and Choctawhatchee Sound is hereby placed under the charge of Lieutenant Geo. C. Alexander of the United States Revenue Cutter Service, for the purpose of preventing refugees leaving Pensacola for points along the bay and sound, without written permission of the State Health Officer of Florida.

Freighters, whether of steam or sail, will register with Lieutenant Alexander, who is in command of the *Penrose*, and who will register, issue license and permission for said freighter to run between points on the bay and sound for the purpose of carrying freight only. No passengers except those having written permission from the State Health Officer will be allowed to pass from Pensacola, and Lieutenant Alexander is hereby vested by me as State Health Officer, having authority under the Statutes of the State, as quarantine officer of the State, to carry out these instructions.

The naphtha launches now being operated by Mr. Zelius and his assistants in the water-patrol of the harbor and bay of Pensacola are placed under the command and charge of Lieutenant Alexander, U. S. Revenue Service, and will obey his orders.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 6.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 2, 1905.

Water Patrol of Harbor and Sound.

1. All launches and vessels of every description, except tow-boats, are forbidden to leave the docks of Pensacola, or water-front of the bay contiguous to the city, after 10 o'clock at night.

2. All crafts whether freighters, plying between Pensacola and points on the bay and sound or tow-boats, must register with the commanding officer of the U. S. Revenue inspection steamer *Penrose*, whose office is at the barge office in the city, and whose hours are from 8 o'clock in the morning to 4:30 p. m.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 7.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 3, 1905.

Sanitary Cordon Regulations Affecting the Electric Line Bay Shore.

1. The first permissible train on the electric line service bay shore for transportation of passengers will leave the City of Pensacola at 7 a. m., for the Big Bayou and returning will leave the Big Bayou at 7:30 a. m. for the city, and in the afternoon will leave Pensacola for the Big Bayou at 5 o'clock p. m.,

returning leave the Big Bayou at 5:30 p. m. Persons living along the line of this electric road will govern themselves according to these hours.

2. The work train crew of the electric road will be permitted to take freight and clay ballast to the Big Bayou between the hours above specified.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 8.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 4, 1905.

Sanitary Cordon of the City of Pensacola.

1. At the request of the State Health Officer, the sheriff of Escambia county has placed a sanitary cordon around the city of Pensacola, to prevent the egress and ingress of all persons from and to the city, without permission of the State Health Officer, who under the authority of the State Statutes is directed to take this measure of precaution under conditions which now exist in Pensacola. This cordon would not have been established if persons—residents of Pensacola—had heeded the advice repeatedly given not to leave the city, but many have done so, and their action has caused fear among the people living in the country and in the nearby country districts and settlements. In some instances the presence of Pensacolians has given rise to almost a panic, and appeals have been made for prevention of this exodus.

When the situation in Pensacola becomes so serious that it is deemed advisable to empty the city as much as possible of its population, a detention camp will be established near Flomaton, on the Florida side of the State line, that every one wishing to leave Pensacola may do so in an orderly manner and without causing fear or apprehension to those living without the city and in the county.

The fear which seems to prompt a desire to "run" is both senseless and unreasonable, and if the citizens of Pensacola will display an equal amount of energy in cleaning up their premises, waging a warfare against mosquitoes in their homes, and destroying all breeding places of these insects, as has been lately manifested by "street corner diagnosticians," it is confidently felt by the State health authorities and their associates that this trouble which now confronts Pensacola can soon be gotten rid of.

2. Persons whose residences for the past few months have been without the city limits—who have been camping along the waterway of the city and on the bayshore—are asked (to prevent confusion and their detention on the guard line) to call upon the State Health Officer and obtain the necessary identification to the guards to enable them to pass to and from the city. This applies also to the truckers and the workmen living without, but nearby, the city limits.

3. Physicians and ministers of the gospel, residents of Pensacola, are allowed to pass from and return to the city without written permits.

4. The hours for egress and ingress of the city except in special cases of emergency, will be from 8 a. m. to 5 p. m.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 9.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 4, 1905.

Additional Water Patrol Regulations.

1. All vessels, including freighters, tugs, launches, fishing boats, and vessels, pleasure boats and all "pulling" boats except boats belonging to and manned by the crews of vessels at anchor in the bay lying off Pensacola, must register at the Barge Office with Lieut. Alexander of the U. S. Revenue Cutter Service, who is in command of the water patrol of the harbor, and who may be found at the barge office or on the *Penrose*. This regulation must be observed before leaving the wharves or waterfront of the city for any purpose whatsoever. The permission granted however is for vessels and crew *only*, and this order includes *all tugs* and other vessels running under a permit issued from this office.

2. Any member of the crew of a vessel may go ashore to attend to urgent business provided permission is first obtained from Lieut. Alexander whose instructions as to parts of the city to be visited must be obeyed under penalty of failure by having permit revoked. Permissions of this character will be for the day only and between the hours of 8 a. m., and 5 p. m.

3. No person is permitted to leave the city either by water or land before 8 a. m., except by special permission from this office.

4. Vessels leaving Pensacola under permit, cannot carry more persons than the necessary crew mentioned in the permit, without special permission from Lieut. Alexander, but launches and other small boats having freight permits may carry persons *direct* to and from vessels at anchor or moored in the immediate harbor.

5. No vessels or boats of any kind or description—including boats belonging to vessels in the harbor—can leave the waterfront of Pensacola between the hours of 10 p. m., and 4 a. m.

6. It is suggested that use be made of the Barge Office landing by small sailing vessels and launches for the purpose of inspection and convenience to themselves and the officer in charge of water-patrol.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 10.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 8, 1905.

Modification of Restrictions on Cordoned Infected District City of Pensacola, Florida.

The sanitary restrictions on the movements of persons within the infected districts which has been under cordon surveillance since August 29th are modified as follows:

Heads of families or wage-earners of families will be allowed to go out of the districts between the hours of 6 a. m., and 6 p. m., but are required to register both on leaving and returning to the district, with the *cordon guard* at the following posts:

At the *Park Hotel*, East Government Street; at Cushman's Alley and Intendencia Street Post; at Romana Street near Bass'

Store, and at Warfield's Store, corner of Alcaniz and Intendencia streets.

Persons to whom this concession is made are required to inform the guards near to where they live of any sickness whatsoever occurring in their families, and are requested to give a hearty cooperation to the health authorities in fumigation of premises where cases of "fever" have occurred or may hereafter occur.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 11.

Executive Office State Board of Health of Florida
Pensacola, Fla.

Revocation of Permits to Enter City from Country Districts and Extension of Guard Line to Include Goulding.

1. The sanitary cordon established around the City of Pensacola on Sunday night, September 3rd, is extended on the north to include the settlement of Goulding.

2. All permits to leave the city to return daily, which have heretofore been issued to persons living a few miles in the country, are hereby revoked and the guards will not permit any one to enter or leave the city without special permission from this office, and will take up all permits previously issued.

3. Permits to leave the city between certain hours which have been issued to residents on the electric car line to the Big Bayou are not affected by this bulletin.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 12.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 11, 1905.

Temporary Change of Executive Office of State Board of Health.

For the more expeditious dispatch of business; to prevent duplicating telegrams through Jacksonville, as well as correspondence, the Executive Office of the Board of Health is temporarily transferred from Jacksonville, Fla., to Pensacola, Fla., from which point the State Health Officer will transact all business relating to this office until further notice.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 13.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 15, 1905.

Release of a Portion of the "Infected Territory" Pensacola.

All of that portion of the "infected territory" in the City of Pensacola, south of Government Street, and from Alcaniz to Jefferson Street, is released from further cordon restrictions.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 14.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 16, 1905.

Removal of Sanitary Cordon within the City of Pensacola.

1. The sanitary cordon established within the City of Pensacola on August 29th is hereby removed.

2. Screening and fumigating of houses where yellow fever cases may develop or may be found will be continued under the direction of Doctors Mallory Kennedy and Clinton D'Alemberte.

3. The mayor and police officers of Pensacola are called upon by the State Health Officer under the provisions of Section 769 of the Revised Statutes, to enforce any and all quarantine regulations made and established by him to eradicate yellow fever from the City of Pensacola.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 15.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 19, 1905.

Quarantine Regulations Governing Freighters of Every Size and Description Plying Between Pensacola and Points on Upper Bay and Choctawhatchee Sound.

1. Freight boats of every size and description plying between Pensacola and points on the upper Bay and Sound and on Choctawhatchee Sound, will be required hereafter to "lay out" five days detention at the Santa Rosa Quarantine Station under the immediate charge and supervision of the medical officer of the U. S. Public Health and Marine-Hospital Service. At the end of five days if the personnel of the crew are not sick or show evidence of yellow fever, he will release the vessel or boat and give the necessary pratique certificate.

2. Under no other conditions except those mentioned above can freighters be allowed into and leave from Pensacola for the points above mentioned.

3. Lieut. Alexander, U. S. Revenue Cutter Service, in charge of the water-patrol of the harbor and bay, will see that these regulations are carried out to the letter, and that freighters leaving the city wharves go direct to the Santa Rosa Quarantine Station.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 16.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 21, 1905.

Additional Restrictions on Travel, Bay Shore.

1. Because of a continued concealment of cases of sickness of a "fever" character, and the discovery yesterday of new foci of infection in parts of the city, some blocks distant from the original focus of infection of yellow fever; in order to prevent the extension of yellow fever to the bay shore, it is deemed necessary to further restrict the "passing to and fro" on the electric

car line and by dirt road to the Big Bayou, and hereafter permits to leave the city and to return by these routes, will be *only* issued to *heads of families* having *bona fide* business in the city and whose actual presence in the city between the hours of 7:30 a. m., and 5:30 p. m., is absolutely necessary to properly carry on said occupation.

2. Women, children and servants will not be permitted to come to the city and return, from the bay shore for the present.

3. The sheriff of Escambia county will instruct his guards to take up all passes on the electric car Bay Shore line, or for the Big Bayou by dirt road, which have been heretofore issued, and will closely observe all permits hereafter granted, that the same have come from this office, and are of this or after this date.

4. Persons entitled under the above provisions to leave and return to the city daily, from the bay shore and the Big Bayou, can procure new permits from Dr. Whitting Hargis, special Assistant to State Health Officer, at Dr. Anderson's office, but Dr. Hargis has been instructed to closely follow the above limitations.

JOSEPH Y. PORTER.
State Health Officer.

Bulletin No. 17.

Executive Office State Board of Health of Florida
Pensacola, Fla.

Restrictions on Vessels Lying in the Harbor of Pensacola.

1. Steamships or other vessels loading or unloading in the harbor of Pensacola are not permitted to have communication with the city, except through the Lieutenant of the U. S. Revenue Cutter Service, who has charge of the water patrol of the harbor and bay.

2. Masters of vessels are forbidden to allow their crews ashore for any purpose.

3. Masters of vessels are forbidden to come ashore themselves and when finished loading and time for sailing arrives they can clear their vessels through the Custom House at the Barge Office.

4. Foreign Consuls located in Pensacola are hereby requested to notify foreign shipmasters for their several nationalities to strictly observe the restrictions mentioned above.

JOSEPH Y. PORTER.
State Health Officer.

BULLETIN No. 18.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 26, 1905.

An Appeal to the Public.

The number of cases of yellow fever reported in the yellow fever bulletin of yesterday, the 25th inst., clearly shows that the infection is widespread throughout the city, which fact even the heretofore skeptical it is thought must now admit, and concealment of cases will only tend to increase the spread and hinder the authorities in destroying infected foci.

Successful treatment of yellow fever almost generally depends upon two factors, which are important both for the lay-

man and the physician to recognize: Promptly sending for medical assistance, and an early recognition of the fever. It is within the first twelve hours that medication of yellow fever patient should be vigorously pushed if a recovery is to be hoped for. After two or three days without medical attention, the element of "chance" enters very largely into the result. Therefore, the State Health Officer earnestly pleads with the citizens of Pensacola, in behalf of their wives, children and themselves, to heed this warning: When awakened from sleep in the early hours of the morning—after midnight and before sunrise—with a chill or "chilly feeling," headache, backache, and soreness of muscles, nausea and general distress at the "pit of the stomach," to at once send for the family physician. Do not ascribe the feeling of general discomfort to "taking cold." Let your doctor find out what is the nature of your illness and treat you. By deferring—putting off—sending for medical aid for three or four days, with the expectation that you or any member of your family "will be better soon," you are most certainly assuming a risk for severe illness, if not later on, to life. You are likewise guilty of wilfully and knowingly assisting in increasing yellow fever throughout the city by affording material for infecting a greater number of mosquitoes. The state of affairs is presented to you citizens of Pensacola. Will you each and every one of you give cooperative assistance in mosquito destruction, promptly reporting cases of illness, screening houses, frequently fumigating, and insisting that your sick ones shall remain under a mosquito net when treated for any kind of fever, or will you continue to obstruct by concealment of cases, under the illogical excuse of "not being afraid of the disease," encouraging others to do so, neglecting precautions, and worse yet, persist in denying the existence of yellow fever in Pensacola?

JOSEPH Y. PORTER.
State Health Officer.

BULLETIN No. 19.

Executive Office State Board of Health of Florida
Pensacola, Fla., September 26, 1905.

A Circular Letter to the Physicians of Pensacola.

Dear Doctor:

The yellow fever infection is spreading so rapidly in the City, that it is now impossible for the State health authorities to "pass upon" all or a majority of the cases of "fever" which may be reported to the city health department. It is safe to say that all sickness of a fever character, commencing with a chill or "chilly feeling" in the early morning hours—after midnight and before sunrise—can now be considered to be yellow fever, treated as such, and so reported. Experience in tropical fevers has shown that generally speaking, malarial fevers have onset in the day time, while yellow fever attacks at night. It is also a maxim of treatment, that vigorous medication must be made in yellow fever within the first twelve hours, to hold out promise of recovery, and that neglect to call a physician until after that period has passed, invites altogether "chance" results. Again: Treat all "fevers" under a mosquito net, and be insistent upon those nursing that the net shall be closely tucked about the bed; frequently examining for mosquitoes, and that the patient shall not leave the bed under any consideration, or for any purpose.

Please report all cases of *yellow fever* promptly to the State Health Officer *not by phone* but in writing on blanks which have been supplied for this purpose.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 20.

Executive Office State Board of Health of Florida
Pensacola, Fla., October 4, 1905.

Important Announcement—Detention Camp.

In view of the fact that so few have taken advantage of the Detention Camp, to-morrow applicants will be received in the order in which they report, due preference being given of course to those who registered first.

Permits for the camp will be issued from 9:00 a. m., till 11:00 a. m.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 21.

Executive Office State Board of Health of Florida
Pensacola, Fla., October 13, 1905.

Quarantine Restrictions Against Certain Counties in Alabama.

The State Health Officer of Alabama having officially reported two cases of yellow fever at Castleberry, Alabama, quarantine restrictions of travel are hereby declared against the counties of Conecuh and Escambia in Alabama, and medical officers and others in charge of railroad and inland water transportation entering Florida from Alabama, are instructed to forbid and prevent persons entering Florida from those counties.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 22.

Executive Office State Board of Health of Florida
Pensacola, Fla., November 5, 1905.

Modifications of Quarantine Restrictions.

The quarantine restrictions against the City of Pensacola, Florida, imposed under authority of section No. 769, Revised Statutes, amended by Chapter 4348 of the Laws of Florida, issued September 4th, 8th and 19th, are hereby modified as follows:

1. Persons residing out of the limits of the City of Pensacola and within a radius of five miles of the city, as well as persons residing in the City of Pensacola, will be permitted to enter and leave the city between the hours of 10 a. m., and 5 p. m., on permits to be issued from the office of the State Health Officer. It must and should be understood however that no permits to enter or leave the city will be issued for pleasure purposes solely, and will be limited strictly to those persons who have business in the city, or who have established nearby homes without the city, as the objects and purposes of this modification of quarantine restrictions is to re-establish business intercourse with the immediate surrounding country under reasonably safe conditions.



CAMP MURRAY.
(U. S. M. H. S. Detention Camp, at McDavid, Florida, during prevalence of yellow fever in Pensacola.)

INTENTIONAL SECOND EXPOSURE

256

SEVENTEENTH ANNUAL REPORT

Please report all cases of *yellow fever* promptly to the State Health Officer *not by 'phone* but in writing on blanks which have been supplied for this purpose.

JOSEPH Y. PORTER.
State Health Officer.

BULLETN No. 20.

Executive Office State Board of Health of Florida
Pensacola, Fla., October 4, 1905.

Important Announcement—Detention Camp.

In view of the fact that so few have taken advantage of the Detention Camp, to-morrow applicants will be received in the order in which they report, due preference being given of course to those who registered first.

Permits for the camp will be issued from 9:00 a. m., till 11:00 a. m.

JOSEPH Y. PORTER.
State Health Officer.

BULLETIN No. 21.

Executive Office State Board of Health of Florida
Pensacola, Fla., October 13, 1905.

Quarantine Restrictions Against Certain Counties in Alabama.

The State Health Officer of Alabama having officially reported two cases of yellow fever at Castleberry, Alabama, quarantine restrictions of travel are hereby declared against the counties of Conecuh and Escambia in Alabama, and medical officers and others in charge of railroad and inland water transportation entering Florida from Alabama, are instructed to forbid and prevent persons entering Florida from those counties.

JOSEPH Y. PORTER.
State Health Officer.

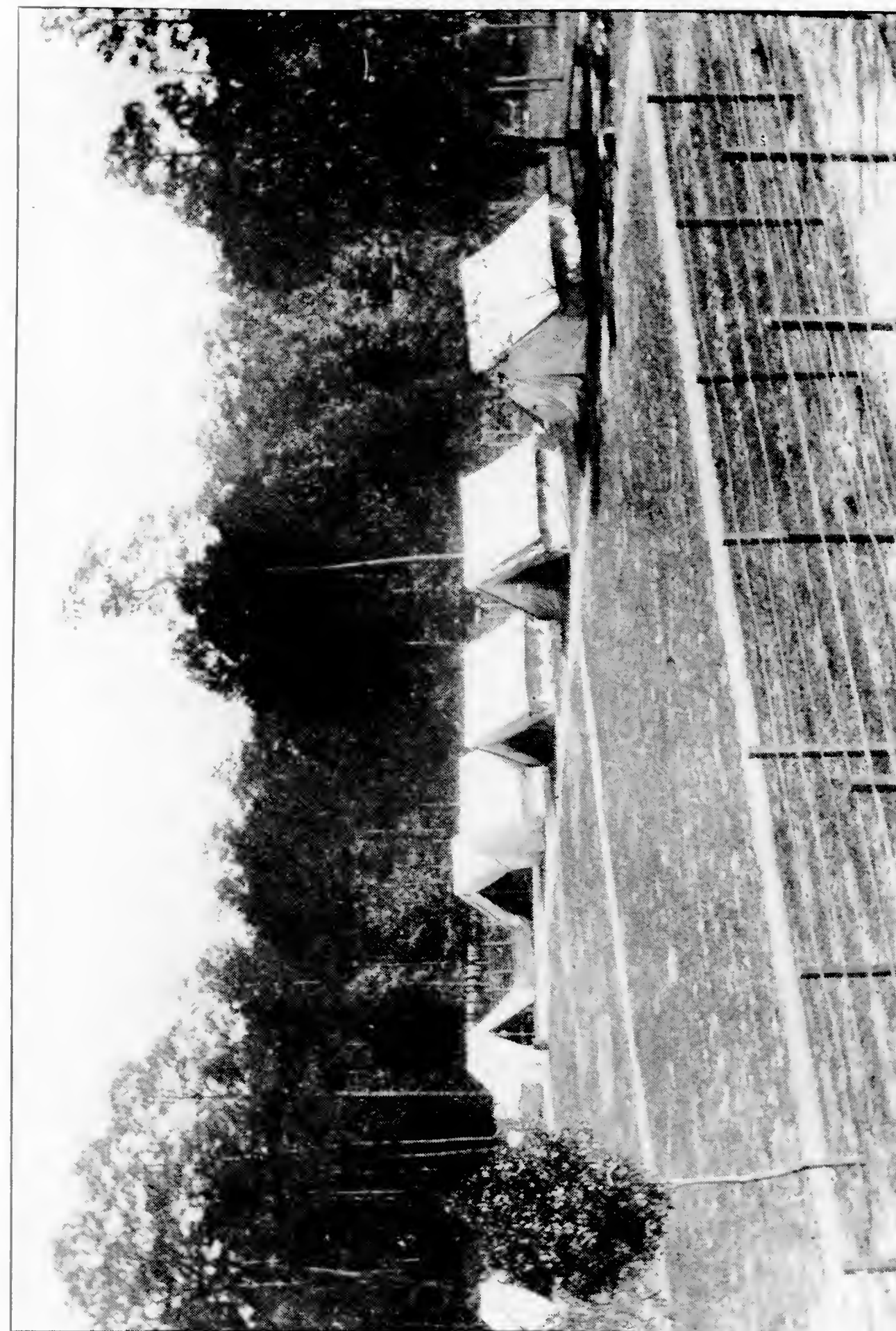
BULLETIN No. 22.

Executive Office State Board of Health of Florida
Pensacola, Fla., November 5, 1905.

Modifications of Quarantine Restrictions.

The quarantine restrictions against the City of Pensacola, Florida, imposed under authority of section No. 769, Revised Statutes, amended by Chapter 4348 of the Laws of Florida, issued September 4th, 8th and 19th, are hereby modified as follows:

1. Persons residing out of the limits of the City of Pensacola and within a radius of five miles of the city, as well as persons residing in the City of Pensacola, will be permitted to enter and leave the city between the hours of 10 a. m., and 5 p. m., on permits to be issued from the office of the State Health Officer. It must and should be understood however that no permits to enter or leave the city will be issued for pleasure purposes solely, and will be limited strictly to those persons who have business in the city, or who have established nearby homes without the city, as the objects and purposes of this modification of quarantine restrictions is to re-establish business intercourse with the immediate surrounding country under reasonably safe conditions.



CAMP MURRAY.
(U. S. M. H. S. Detention Camp, at McDavid, Florida, during prevalence of yellow fever in Pensacola.)

2. Captains of vessels lying in the harbor and along the docks of the city are permitted to come up and into the city for the purpose of transacting business, between the hours of 10 a. m., and 5 p. m. This concession of quarantine regulations applies to masters of vessels alone and not to crews.

3. Freighters and boats carrying produce of any kind, formerly plying between the City of Pensacola and points on the upper bay and sound are permitted to resume their trip-routes, *provided*, that they time their arrival at Pensacola after 8 a. m., and leave the city the same day before 5 p. m. Loading and unloading of freight and the stay of freighters in the harbor and at docks, must be under the supervision and direction of Lieut. Alexander of the U. S. Revenue Cutter Service, who is in charge of the water-patrol of the harbor and bay of Pensacola. Captains of freight and mail boats will be permitted to come up and into the city to transact business, but the crews are required to remain on board.

4. Freight and mail boats are forbidden to take passengers from Pensacola without written permission of the State Health Officer over his own individual signature.

5. The Steamer *City of Tampa* will be permitted to make daily trips to Milton, under the provisions of Section 4 of this bulletin.

6. Persons from the country coming into the city under the provisions of this bulletin are requested for the present not to enter homes or residences, and, when bartering commodities, to remain outside of residences, or buildings used as dwellings. Visiting city homes by those from the country districts should be discouraged for the present, both by would-be-host and guest.

7. Any violation of the provisions of this bulletin will cause a permit or permits issued under the terms thereof, to be revoked.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 23.

Executive Office State Board of Health of Florida
Pensacola, Fla., November 12, 1905.

Removal of Quarantine Restrictions on New Orleans. Louisiana and Mississippi.

1. The quarantine restrictions on travel ordered by the State Board of Health of Florida on July 22nd, 1905, against the City of New Orleans because of yellow fever prevailing in that city, and subsequently extended to include other yellow fever infected points in Louisiana and Mississippi, will be removed at midnight this date.

2. The relay of trains at Escambia will be discontinued, and trains will hereafter leave the city passenger station, but no passenger travel is permitted to points eastward from Pensacola for the present.

3. Restrictions placed heretofore on the Bay Shore Electric Car Line are removed and no permits are hereafter required from and to the Bayou by this route of travel.

4. The restrictions of quarantine against Pensacola, as modified by Bulletin No. 22, November 5th, 1905, will for the present remain unchanged.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 24.

Executive Office State Board of Health of Florida
Pensacola, Fla., November 13, 1905.

*Quarantine Restrictions Against Pensacola for Florida Points
to Eastward and South Still in Force.*

Although quarantine restrictions on travel against New Orleans, Louisiana and Mississippi have been removed, yet quarantine restrictions on travel against Pensacola—imposed on August 29th, 1905, on account of existing yellow fever—for the State of Florida, have not been removed, and will be continued until the *National and State Health* authorities direct to the contrary, therefore this is to warn travelers leaving Pensacola for States to the north of Florida that any attempt to enter the State via other States, when detected, will meet with arrest as in violation of Florida Quarantine Regulations.

JOSEPH Y. PORTER,
State Health Officer.

BULLETIN No. 25.

Executive Office State Board of Health of Florida
Pensacola, Fla., November 18, 1905.

Removal of Quarantine Restrictions Against Pensacola.

The quarantine restrictions imposed on travel by the State Board of Health of Florida, under the authority of the State Statutes, against the City of Pensacola on August 29th, on account of the prevalence of yellow fever, are removed, and travel and intercourse between the City of Pensacola and other points in Florida will be resumed 6 a. m. November 19th.

JOSEPH Y. PORTER,
State Health Officer.

AN ORDINANCE to Provide for the Extermination of Mosquitoes, and the Destruction of their Larvae.

Be it ordained by the Mayor and Council of the City of Pensacola:

SECTION 1. It shall be the duty of all persons residing within the corporate limits of the City of Pensacola to cover or screen, and to keep covered or screened, with wire netting not larger than number eighteen (18) mesh all cisterns, tanks, reservoirs, (including flush tanks to water closets not in daily use) or other open bodies of standing water upon their premises.

SEC. 2. Whenever it is not practicable to screen or cover any cistern, tank, reservoir, or other open bodies of water, as required by the foregoing section it shall be the duty of the occupant of the premises to oil with kerosene all such cisterns, tanks, reservoirs or other open bodies of standing water at least every fifteen (15) days, using not less than one ounce of kerosene to every fifteen (15) feet of surface oiled. When premises on which any such cistern, tank, reservoir or other open body of water may be shall be unoccupied, it shall be the duty of the owner of such premises, or the agent thereof, to cause the same to be covered, or screened, or oiled, as is provided in this and the foregoing section.

SEC. 3. Whenever it shall be impossible to either screen or oil any cistern, tank reservoir, or other open body of water as herein before provided, it shall be the duty of the owner, or agent of the premises, or the occupant thereof, if the same be occupied, to stock the same with minnows, or small fish, and to keep the same so stocked.

SEC. 4. It shall be the duty of all persons residing within the corporate limits of the City of Pensacola to empty at least every seven days all kegs, barrels, boxes, jars or other vessels, or receptacles of whatsoever kind upon their premises, which contain water, unless the same shall be kept securely covered or screened, and all such persons, or their agents, who may own any vacant lot within the corporate limits of the City of Pensacola shall cause to be removed therefrom all barrels, kegs, glass or crockery, tin or woodenware, boxes, jars, or any other vessel or receptacle which may contain water unless the same shall be kept securely covered or screened.

SEC. 5. That any person convicted of violating any provision of this ordinance shall be punished by a fine not exceeding fifty (50) dollars or by imprisonment not exceeding thirty (30) days, or by both such fine and imprisonment.

SEC. 6. That this ordinance shall take effect immediately after its passage and approval, and shall remain in force during the period beginning March 1st and ending November 1st, 1906.

SEC. 7. That all ordinances and parts of ordinances in conflict herewith be and the same are hereby repealed.

AN ORDINANCE to Provide for the Prompt Report of Fever Cases, and to Protect the Public Against the Recurrence of Yellow Fever in the City of Pensacola:

Be it ordained by the Mayor and Council of the City of Pensacola:

SECTION 1. That it shall be the duty of every physician practicing in the City of Pensacola during the period beginning March 1st and ending November 1st to report in writing to the City Health Officer all cases of acute fever which may come within his knowledge or observation, together with the name and address of the persons having such fever, within twelve (12) hours after the discovery of such case, or cases.

SEC. 2. In any or all such cases reported to him the City Health Officer shall, subject to such rules and regulations as may be prescribed by the City Board of Health, be empowered and required to investigate the case or cases so reported to him, and if he has any doubt or suspicion concerning the nature of the illness, he shall report the fact immediately to the resident agent of the State Board of Health, and shall aid and assist such agent in such other or further investigation as may be necessary to determine the nature and cause of any such case or cases. And the City Health Officer is hereby authorized and empowered to enforce the fumigation of any place, building or premises where any such case of fever exists, or may have been, with such disinfectants and in such manner as may be prescribed by the rules and regulations of the City Board of Health.

SEC. 3. Whenever any physician, practicing his profession within the City of Pensacola, shall be called to see or attend any case of acute fever between March 1st and November 1st, it shall be his duty to order such case to be screened at once, and if such

is not done he shall so report to the City Health Officer, who, shall subject to such rules and regulations as the City Board of Health may prescribe, take such measures as may compel the proper screening of the patient for such time as may be required to render such case harmless to the public health.

SEC. 4. It shall be the duty of every parent or guardian of any child and the head of every family to properly screen any and all cases of acute fever occurring in their respective families between March 1st and November 1st, and to keep such case or sick person screened with a mosquito net for the first seventy-two (72) hours during the attack of illness.

SEC. 5. That any person convicted of violating any provision of this ordinance shall be punished by a fine not exceeding fifty (50) dollars, or by imprisonment not exceeding thirty (30) days, or by both such fine and imprisonment.

SEC. 6. That this ordinance shall take effect immediately on its passage and approval, and shall remain in force during the year 1906.

SEC. 7. That all ordinances and parts of ordinances in conflict herewith be and the same are hereby repealed.

Letter from Surgeon Smith of New Orleans, July 24th, 1905, to Marine-Hospital Bureau, Washington.

I have the honor to report upon the events of the present week which have led to the establishment of quarantine against the City of New Orleans by health boards of neighboring States.

In the forenoon of Tuesday July 18, I was informed that there were rumors of the existence of yellow fever in a block bounded by Decatur, Chartres, Ursulines, and St. Philip streets, and that there had been deaths. I visited the region in the afternoon, and on one door saw a death notice. A woman standing by volunteered information about the character of the man's sickness and the mode of death, which made the case look very much like yellow fever. The block described is occupied mostly by Sicilians, and they are very secretive, and I believe do not always call a physician in case of sickness. I thought it best to go directly to the president of the City Board of Health, Dr. Quitman Kohnke. He said there had been no diagnosis of yellow fever made by any physician, and no report of death from that disease, but said there was talk of suspicious cases, and that he was fumigating rooms wherever he heard of any sickness in the quarter of the city described. I then sent my first telegram to the Bureau. (See telegram July 18, 1905.)

On Wednesday, July 19th, I went to see Dr. Edmond Souchon, president of the State Board of Health. He showed me a letter which he had written to the Bureau announcing that there had been four or five cases suspected of being yellow fever, but that no diagnosis of that disease had been made. He informed me that he had also telegraphed the Bureau, and had telegraphed and written to the State health officers of Alabama, Mississippi, and Texas. I asked him to let me see some of the suspicious cases, and he replied that that matter was in charge of Dr. Kohnke, and that Doctor Kohnke would undoubtedly let me do so. I immediately applied to Doctor Kohnke and asked him to let me see some cases. He said he would be very glad to do so if he had control of any, but they were all in the practice of private physicians, who would not consent to have their cases investigated.

Thursday afternoon I received a telephone message from a prominent business man, asking me to meet him in the evening for a conference at the office of the City Board of Health. I hoped that this meant that something would be given out concerning conditions in the city and the plans of the Board of Health, but in this I was disappointed. The same night I received a message from Dr. Souchon to meet him the next morning, and on Friday morning he telephoned me that Health officers from Alabama had arrived in the city to make an investigation, and invited me to meet them and join in the investigation. Some cases were to be shown us, and there would probably be a necropsy. When I reached the office of the State Board of Health Doctor Souchon was absent, but I saw Dr. G. F. Patton, secretary of the Board, and Surgeon J. H. White, of the service, and two health officers representing the State of Alabama and the City of Mobile.

They visited one of the hospitals and made a tour of the suspected district, accompanied by Dr. A. Nolte, of the State Board of Health, with the result reported in my letter of yesterday. Quarantine is reported to have been instituted against New Orleans by the City of Mobile at 3:45 p. m., and the conference between the visiting and local health officers and others, reported in my letter of yesterday, took place about 4 to 5 p. m.

This morning (Saturday) Doctor Souchon invited me to witness a necropsy at Charity Hospital at noon. Positive evidence of yellow fever was found, as already wired by me.

I reported these matters in detail, because I desired that the Bureau should have as complete a history of the events of the week as possible. I neglected to wire information of rumors, because I was constantly hoping to get hold of facts which would be more definite and satisfactory than any I had.

Executive Office State Board of Health of Florida
Pensacola, Fla., November 19, 1905.

Dr. Walter Wymann,

Surgeon-General, P. H. & M. H. S.,
Washington, D. C.

Dear Doctor:

The President of the State Board of Health of Florida requests me, on behalf of himself and his associates of the State Board of Health, to convey to you his sincere thanks and appreciative acknowledgment of the substantial co-operative assistance which you have given to the people of Florida in the late epidemic prevalence of yellow fever in the South. He greatly recognizes the value of the aid which you have generously given, in the loan of tents, use of Camp Perry as a train inspection point, and by the water-patrol of Pensacola harbor and bay; the latter making it difficult and troublesome to would-be refugees to leave Pensacola by water for other points in the State, and therefore ineffectual.

I wish to add my own thanks, personally and officially, to those expressed by the President of the Board and to signify my personal gratitude for the advice, counsel and encouragement which I have received from you and from the Bureau during many trying moments in the management of affairs at Pensacola.

Yours very truly,

JOSEPH Y. PORTER,
State Health Officer.

Executive Office State Board of Health of Florida
Pensacola, Fla., November 19, 1905.

The Honorable,
Secretary of the Treasury,
(Through the Surgeon-General P. H. & M. H. S.,)
Washington, D. C.

Dear Sir:

The President and members of the State Board of Health of Florida, with the State Health Officer, desire to express to you, and through you, to Captain Hanks, of the U. S. Revenue Cutter Service commanding the U. S. Revenue Cutter *Hamilton* and the officers and crew under his command, their appreciative thanks for the valuable and most excellent service rendered to the State of Florida, and to the State Board of Health thereof, in efficiently patrolling the coast during the past three months, to intercept refugees from yellow-fever infected points, entering Florida. Similar acknowledgments are due and likewise made to Lieutenant Alexander and Bryan of the U. S. Revenue Cutter Service, in charge of the cutter *Penrose*, for their careful administration of the water patrol of Pensacola, harbor, bay and upper sound, and their vigilance and firmness in complying at all times and observance of every detail of quarantine regulations. The State Board of Health feels not only grateful for the service of co-operation, but likewise under obligations for the relief of expense in this regard, which the National Public Health Department has so generously assumed.

Very respectfully,

JOSEPH Y. PORTER,
State Health Officer.

Hypothetical Origin of the Recent Epidemic of Yellow Fever in Havana. From October 17th to December 31st, 1905.

The date obtained from the local physicians and a careful revisal of the death certificates, issued in the district of Havana previous to October 17th, having failed to elicit any evidence of cases of yellow fever prior to that date, it behooves us now to try and discover the manner in which the infectious germ may have been introduced.

A priori, the most likely source of infection for this city, at the beginning of October, was undoubtedly New Orleans where the disease had prevailed since July and had acquired such proportions that notwithstanding the very efficient efforts of the U. S. Public Health and Marine-Hospital Service, the disease was only finally stamped out in the month of December after the first frost of the winter. Other ports of the Gulf States had also been infected, but none had such constant commercial traffic and interchange of passengers with Havana as New Orleans.

Once a week a steamer had been making direct trips between New Orleans and Havana, covering the distance in less than three days; with the aggravating circumstance that the vessel was never fumigated at either of the ports and that during its stay at New Orleans it was tied to a wharf situated in one of the most severely infected quarters of that city. In Havana, the measures taken against those steamers consisted in forbidding their approach to the wharves, only allowing cargo to be taken from or into the vessel in lighters by means of an immune personnel, and holding in strict quarantine, during five days after leaving the ship, all persons who could not prove their

immunity for yellow fever. None but immunes were allowed to come ashore or to visit the ship. Immune passengers, on the other hand, were permitted to land forthwith without hindrance of any kind.

Thus it was supposed that the entrance of infected persons from New Orleans would be sufficiently guarded against. But another obvious, though evidently exceptional, source of infection appears to have been overlooked.

While the steamer was tied to the wharf in the infected quarter, at New Orleans, some of the infected stegomyias, driven from their habitual haunts by the daily fumigations, may well have sought a refuge in the cabins of the steamer lying within their immediate reach. Any immune passenger who occupied a cabin, on reaching Havana would be allowed to land at once, and in the hurry of packing up his clothes and other objects scattered about the cabin into valises, hand-bags or bundles, he might possibly have imprisoned some of the infected stegomyias and carried them in the steam tug which brings the passengers from the vessel to the passengers' landing station, (*casilla de pasajeros*) on the wharf. Here the bags and bundles would have to be opened for the custom house inspector and the imprisoned stegomyias being thus set free might make that building their permanent quarters.

Method of
transportation
of stegomyia.

If such a thing were to happen, it might be expected that among the non-immune passengers from non-infected ports who would pass through that same (*casilla*) some might be bitten by the infected stegomyias and would develop an attack of yellow fever within the usual period of incubation, that is, three, four or five days after landing. This is precisely what has happened with three of the first eleven cases recorded in the adjoining table. No. 2 arrived from Genoa via New York, on the 19th of October, and was taken sick on the 23rd. No. 5 arrived from New York on the *Mexico* on the 1st of November and was taken sick on the 5th. No. 11 came also from New York on the *Vigilancia*, the 8th of November, and fell sick on the 11th. Moreover, in case No. 1 although the patient had been living at San Miguel 14 for over a month, he worked all day on the wharves receiving merchandise for his employers, and it is not unreasonable to suppose that he may sometimes have visited the "*casilla*;" so that it was probably also from this source that the first case of the series derived his infection.

Shortly after the investigation of case No. 11, the "*casilla*" as well as the steam tug were thoroughly fumigated and during the rest of the epidemic not another case occurred in which the attack of yellow fever has taken place so soon after the patient's arrival at this port.

The above hypothetical explanation of our epidemic may be considered more or less acceptable according to the views entertained regarding the habit of the stegomyia fasciata. Its plausibility, however, can hardly be questioned in view of two authentic instances of mosquitoes which had been accidentally imprisoned in a trunk, in one case, and in a bundle of clothes in the other, in this very city of Havana; the insects having flown out from their place of confinement when the trunk was opened or the bundle untied. I have thought proper therefore, to state my views on the matter, even if they serve no other purpose beyond suggesting the adoption of precautionary measures when circumstances such as I have described combine to make the importation of infected mosquitoes possible.

Board of Trade Rooms.
Tampa, Fla., January 9, 1906.

Resolutions of
the Tampa
Board of
Trade.

WHEREAS, The Tampa Board of Trade has heard with much regret that Dr. Joseph Y. Porter, State Health Officer, has tendered his resignation to the State Board of Health and as this body still retains in Dr. Porter the same confidence to which it has hitherto given expression, and

WHEREAS, the State Board of Health has not yet accepted said resignation, therefore,

Be it resolved, By the Tampa Board of Trade, that we earnestly hope Dr. Joseph Y. Porter will reconsider and withdraw his resignation as State Health Officer and will continue in the service of the State of Florida in the capacity in which he has been of so much value for the successful discharge of the duties of which he is so eminently qualified.

Resolved, That the Secretary be directed to furnish copies of this resolution, signed by the President and attested by the seal of the board, to Dr. Porter and to the President of the State Board of Health.

Done by order of the Tampa Board of Trade this 9th day of January, 1906.

(Signed)

W. R. FULLER,
President.

J. D. CALHOUN,
Secretary.

Resolutions of
the Marion
County Medi-
cal Society.

The MARION COUNTY MEDICAL SOCIETY at an informal meeting took notice of the resignation of Dr. Joseph Y. Porter as State Health Officer, and resolved that the society, as a whole and as individuals, sincerely deplores the fact, and that we do not think the place can be acceptably filled.

We believe that Dr. Porter's record as State Health Officer has been practically faultless and trust that he will reconsider his determination to resign the position. It was further resolved that Dr. Porter be furnished a copy of these resolutions.

E. VAN HOOD,
President.

D. M. SMITH,
Secretary and Treasurer.

Autograph
signatures.

S. H. Blitch,
W. R. O. Veale,
J. G. Baskin,
A. B. McQuinn,
W. Griffith,
A. L. Izlar,
W. H. Powers, M.D.,
J. W. Hood, M.D.,
D. A. Smith, M.D.,
C. W. Linduer,
E. G. Linduer, M.D.,

Wm. V. Newsom,
P. Burgin,
H. C. Walkuss, M.D.,
Geo. A. Means, M.D.,
Dr. J. L. Davis,
H. Gatull, M.D.,
H. W. Henry, M.D.,
S. T. Carswell,
B. P. Wilson,
Benj. F. Lisk,
Jno. M. Thompson, M.D.

Resolutions of
Jacksonville
Board of
Trade.

WHEREAS, Dr. Joseph Y. Porter has tendered his resignation as State Health Officer, and

WHEREAS, we feel that on account of his professional and executive ability, to lose his service in that capacity would be a

great loss to the State Board of Health, and to the State of Florida, and

WHEREAS, the Jacksonville Board of Trade, and we believe all the representative people of the State, have implicit confidence in Dr. Porter's administrative ability and integrity, therefore be it

Resolved, That we sincerely hope that the State Board of Health may be able to induce Dr. Porter to reconsider his resignation and that the same may be withdrawn. Be it further

Resolved, That a copy of these preambles and resolutions bearing the signature of the President of the Board of Trade and the seal of the Board be forwarded to Dr. Porter, and to the President and members of the State Board of Health.

(Signed)

C. E. GARNER,
President.

CHAS. H. SMITH,
Secretary.

Resolutions Unanimously Adopted by the Key West Chamber of Commerce.

WHEREAS, Dr. J. Y. Porter has presented his resignation as State Health Officer; and

WHEREAS, We, his fellow citizens, feel that on account of his personality and his well known professional and executive ability, the acceptance of his resignation would prove a great loss to the State Board of Health and to the State of Florida; and

WHEREAS, We feel that all the citizens of the State join with us, who have the advantage of a personal acquaintance with him, in having implicit confidence in his professional knowledge, his administrative and executive ability and his personal integrity; therefore be it

Resolved, That we urge Dr. Porter to reconsider and withdraw his resignation and call on the State Board of Health and the citizens of the State to join with us in this appeal to Dr. Porter to sacrifice his personal desires for the public welfare:

Resolved, That a copy of these preambles and resolutions be sent to Dr. Porter and to the President and members of the State Board of Health, and to the Press of the State.

E. M. MARTIN,
Secretary.

W. D. CASH,
President.

Regulations Governing the Uniforms of Officers and Employees of the State Board of Health of Florida.

Executive Office State Board of Health of Florida
Jacksonville, Fla., January 1, 1906.

In accordance with a resolution adopted by the State Board of Health of Florida at a meeting held in the City of Jacksonville, Florida, December 19, 1905, the following regulations, prescribing the uniforms to be worn by the officers and employees of the State Board of Health of Florida, are hereby prescribed and published for the guidance and government of all concerned:

JOSEPH Y. PORTER,
State Health Officer of Florida.

Approved:

E. M. HENDRY,
President State Board of Health.

Resolutions of
Chamber of
Commerce,
Key West, Fla.

REGULATIONS

UNIFORMS FOR ASSISTANTS TO THE STATE HEALTH OFFICER—FATIGUE.

Coat—To be made of dark navy-blue cloth or serge, shaped to the figure, to fall as low as the upper joint of the thumb when the arm is hanging naturally by the side; a slit over each hip, extending five inches from the bottom of the coat; single breasted, with a "fly" front, fitted with plain flat back, gutta-percha buttons, and a standing collar. The collar, edges of the coat side seams of the back from shoulder to the edge of the skirt, and the edges of the hip slits to five inches from the bottom of coat shall be trimmed with black, lustrous mohair braid, one inch and one-fourth wide, laid flat; in addition to which, at a distance of one-eighth of an inch (with an overhand turn three-eighths of an inch in diameter at each change of direction), shall be placed a narrow black mohair soutache braid one-eighth of an inch wide. The grade mark on the sleeves shall be a double thickness of black, lustrous mohair braid, showing the same width and disposition as indicated for the grades of First, Second, Third and Fourth Assistants to the State Health Officer of Florida. This coat shall be worn entirely buttoned. Pockets shall be on the inside of the coat.

Trousers—Same material as coat.

Waistcoat—Same material as coat single-breasted, with collar, cut high in front, with seven small State Board of Health of Florida buttons, the upper one to be not more than four inches below the collar button in the neckband of the shirt.

Cap—To be of dark-blue cloth, slightly oval top, with three cloth welts, one around top of cap, one around top of band, and one around base of cap, one-eighth inch from edge; total depth, three and one-half inches; diameter across the top to be one inch larger than size of head. The sides to be made in four pieces; to be one and one-half inches between upper welts, and stiffened with hair cloth and wire around crown. Between the two lower welts a band of one and three-fourth inches in width of black, lustrous mohair braid. Vizer to be of patent leather, one and three-fourths inches deep at the center, and of green leather underneath; to drop at an angle of about 45 degrees. Cap to be provided with flat gold-wire lace chin-strap half inch wide, to be held at sides by two small regulation gilt buttons. Two black metal eyelets on each side of cap for ventilation. An oil-silk cover may be worn in foul weather.

Cap Device—The Coat of Arms of the State of Florida, with "FLORIDA" below, the whole encircled with a wreath, and embroidered on the front of cap.

Collar Ornaments For Service Uniform—Fatigue—The letters F.L.A. reading from left to right, one-half inch in height, in dead-gold bullion, shall be embroidered in high relief on each side of collar, one inch from front edge. One-half inch behind these letters the monogram of the State Board of Health, one inch in diameter, in dead-gold bullion, shall be embroidered in high relief on each side of collar. Collar ornaments may be in the form of detachable collar plates of yellow metal.

Grade Marks on Sleeves—For First Assistant to the State Health Officer: Five bands of black lustrous mohair braid, three bands, one-half inch wide with two bands one-fourth inch wide between, distances between bands one-fourth inch.

For Second Assistant to the State Health Officer: Four bands of black lustrous mohair braid, two bands one-fourth inch wide between, distance between bands one-fourth inch.

For Third Assistant to the State Health Officer, same as for Second Assistant, omitting one-fourth inch band.

For Fourth Assistant to the State Health Officer, same as for Third Assistant, substituting one-fourth inch band for upper band.

Buttons—Shall be gilt, convex, and of two sizes, large seven-eighths, and small nine-sixteenths of an inch in diameter; same in style as used by State Militia with State Coat of Arms in raised die, with State Board of Health also raised and encircling.

WHITE UNIFORM.

This uniform may be worn in warm weather as a substitute for the fatigue uniform.

Coat—Similar to fatigue uniform coat as above described, but of white material, and to be trimmed with white braid.

Waistcoat—(Optional) As described above, but of white material.

Trousers—As described above, but of white material.

Cap—As described above, but of white material, omitting cap device. Vizer to be of black patent leather.

Collar Ornaments—As described above.

Grade Marks On Sleeve—As described above, but of white braid.

KHAKI UNIFORM.

This uniform may be worn as a substitute for the fatigue uniform when Medical Officers are on special duty in Country Districts and in field work.

Coat—To be of khaki cotton or olive-drab wool serge, made with a single plait two inches wide in the back and extending from the collar to the end of shirt; with two outside breast pockets and two outside pockets below the waist; pockets covered by flaps, buttoned by small service button; the breast pockets to have a plait in the middle three-fourths of an inch wide. The coat to have standing collar, fastened by two hooks and eyes, from one and one-half to two inches width, depending on wearer; a strap on each shoulder reaching from the sleeve seam to the collar seam and buttoning at the upper point with a small service button; straps to be one and one-half inches wide at sleeve and one inch wide at collar. Coat to be buttoned by five large State Board of Health buttons. The straps to be of same material and collar as coat.

Insignia—All Officers to wear the insignia of their grade in yellow metal on shoulder strap, about one-third distant from the shoulder-seam to the collar. 1st for First Assistant, 2nd for Second Assistant and so on.

Collar Ornaments—As previously described.

Trousers—As previously described but of same material as coat.

Cap—As previously described but of khaki cotton or olive-drab material, omitting cap device, and substituting black leather chin strap.

Hat—Campaign hat of felt, as nearly as practicable the color of khaki uniform, to be ornamented with a double cord three-sixteenths of an inch in diameter of gold bullion and black silk intermixed.

UNIFORM FOR SANITARY PATROLMEN AND COUNTY SANITARY AGENTS.

This uniform shall be worn on all Official Inspections and Sanitary Patrol Duty.

FOR COUNTY SANITARY AGENTS.

Coat—The same as previously described as fatigue uniform for Assistants to the State Health Officer, omitting the one-eighth inch soutache braid, and all braid on back and sleeves. A monogram of the letters S. B. H. in dead-gold bullion in high relief, one-half inch in length shall be embroidered on each side of collar, one inch from front edge, on roll of collar.

FOR SANITARY PATROLMEN AND GUARDS.

Coat—A double breasted sack coat of dark navy-blue cloth or serge fitted to the figure, rolling collar; with five large State Board of Health buttons on each side of coat, and three small buttons same device on sleeves.

Collar ornament for Sanitary Patrolman shall be a monogram of letters S. B. H. in dead-gold bullion in high relief, one-half inch in length embroidered on each side of the collar, one inch from front edge, with PATROLMAN in dead-gold bullion of the same length, one-quarter inch back of monogram and reading from left to right.

Collar ornament for Guards shall be the same in style as for sanitary patrolmen, substituting the word GUARD for patrolman after the State Board of Health monogram.

The collar ornaments on all uniforms may be in the form of detachable yellow metal plates.

Trousers—Same as described for all officers.

Cap—Same as Medical Officers, with words AGENT, SANITARY PATROLMAN, or GUARD embroidered on cap, or in metal letters one-half inch below the State Board of Health Monogram Cap device.

KHAKI UNIFORM.

For Agents, Sanitary Patrolmen and Guards, may be worn as prescribed for Assistants to the State Health Officer with collar ornaments as designated for each grade.

Hat—Campaign hat of felt, as near as practicable the color of Khaki uniform, to be ornamented with a yellow cord of firm material.

FOR SUMMER WEAR—APRIL TO OCTOBER.

Coat—Of white or brown linen single breasted cut high to neck with five large State Board of Health buttons. Collar of coat to be standing with ornaments of grade on each side of collar.

Hat—White straw, flat crown, with Cap device in detachable metal plate and letters.

The above described uniform for Officers and Employees of the State Board of Health of Florida is hereby adopted and will be worn.

JOSEPH Y. PORTER,
State Health Officer.

Approved:

E. M. HENDRY,
President State Board of Health.

THE NEW ORLEANS IMBROGLIO.

(Journal American Medical Association Dec. 16, 1905.)

The entire State Board of Health of Louisiana has resigned, including the president, Dr. Edmond Souchon. Following the submission to Governor Blanchard of their report on the epidemic of yellow fever, it is said that the governor announced that he wanted an investigation of the circumstances responsible for the entrance of yellow fever infection. He expressed the intention to ask a grand jury to determine who, if any one, had failed to do his duty. Thereon the board resigned. In its report the board concludes that it is not possible to decide the source of the original infection, but it presents probable hypotheses. It points out that in July a physician at Gulfport, Miss., was fined for reporting a doubtful case of yellow fever, though many cases subsequently developed in Gulfport, and though Governor Vardaman later severely scored physicians who did not promptly report cases. "Ship Island (Quarantine Station) is close to Gulfport; so is New Orleans, and the inference is obvious." Colon and Havana are suggested as possible sources of infection, as are Bocas del Toro, Belize and Port Cortez. The board suggests that the officers of our Public Health and Marine-Hospital Service stationed at Belize and Cortez did not learn of yellow fever at these ports until several weeks after the early cases occurred. Complaint is made that the Surgeon-General of the Public Health and Marine-Hospital Service did not order the fumigation of empty vessel holds at infected Colon until requested to do so in June by President Souchon. It is pretty squarely charged that Havana concealed cases for months, and Cuba's quarantine system is declared to be a farce. It is also alleged that early in the summer one man twice came from infected Vera Cruz and entered Texas at Laredo without any difficulty. It is recommended that the quarantine season be advanced to begin on March 1, and that the detention period be made six days instead of five.

"The State Board of Health positively denies the statement of Dr. Kohnke in his official report" that he informed the board of suspicious cases early in July. Dr. Souchon says he received the first news of cases from physicians and notified Dr. Kohnke, and Dr. Kohnke, in his report as published, makes the same statement. In justification of its course the board makes one plea that carries weight. From the day when the first suspicious case was reported several days had to elapse before a positive diagnosis could be made, and to announce prior to demonstration that yellow fever existed would have thrown business into useless turmoil.

In our issue of two weeks ago, it was noted that the chief count in the indictment brought against the Louisiana health officials by the public, and especially by the Mississippi authorities, was the fact that reduced-fare railroad excursions into New Orleans from neighboring towns and States on July 19 were permitted without warning of danger to bring great crowds into an infected city. This is based on the fact recorded by Dr. Souchon and Dr. Kohnke that the first suspicious cases were reported on July 12 and again on July 15. Dr. Souchon reports symptoms of yellow fever." He called a meeting of the State systems of yellow fever." He called a meeting of the State Board of Health for July 19 (the very day the excursionists were in the city), at which meeting a resolution was passed "instruct-

Excursions to
New Orleans
July 19.

ing President Souchon to write to Dr. Wyman, Dr. Tabor of Texas, Dr. Hunter of Mississippi, and Dr. Sanders of Alabama that there were cases here presenting symptoms of yellow fever, and also to wire them to expect a letter by to-day's mail." The first positive diagnosis confirmed by autopsy findings was made on July 22.

So far as present information goes, therefore, it is impossible fairly to charge the Louisiana authorities with deliberate concealment. Of course it was the very acme of unfortunate mischance that a popular excursion to New Orleans should have been run during the very days when the diagnosis was necessarily in doubt. Mere suspicion of infection would not have justified the alarm aroused by canceling the excursions, nor is there the least evidence that the authorities knew that the infection was sufficiently widespread to endanger the excursionists of a day. Of course, it is also only too evident that the real early cases, those during May and June, were not reported to the authorities nor found by inspection. In part, this was due to the misleading mildness of the typical first cases and to the consequent and wholly excusable failure of diagnosis, but, it is to be feared, in further part to concealment of cases by a few physicians practicing among the Italians.

In New Orleans, as elsewhere in this country, the public and the authorities have not secured effective sanitary organization, with all its requirements and restrictions. From this defect in preparation as the fundamental factor arise such controversies as the present one in New Orleans. This one could have been avoided had the community heeded the pleadings of Dr. Kohnke, three years previously, that scientific preparations be made to meet a possible yellow fever infection.

TABLE showing birth and death rate as reported to State Board of Health, in 1905.

COUNTIES	Population	Birth Rate	Death Rate
Alachua.....	32,245	6.29	1.11
Baker.....	4,512	1.88	.21
Bradford.....	10,295	12.23	3.39
Brevard.....	5,158	14.92	6.01
Calhoun.....	5,182	8.68	1.73
Citrus.....	5,391	2.22	1.30
Clay.....	5,635	2.12	1.06
Columbia.....	17,094	4.27	1.22
Dade.....	4,955	18.76	7.06
DeSoto.....	8,047	9.44	5.21
Duval.....	39,733	26.40	25.94
Escambia.....	28,313	23.06	18.11
Franklin.....	4,890	6.58	1.02
Gadsden.....	15,294	8.76	9.87
Hamilton.....	11,881	3.95	.04
Hernando.....	3,638	2.47	2.47
Hillsborough.....	36,013	3.38	1.47
Holmes.....	7,762	4.25	....
Jackson.....	23,337	7.15	.76
Jefferson.....	16,195	3.70	.24
LaFayette.....	4,987	8.21	.20
Lake.....	7,467	9.77	5.22
Lee.....	3,071	19.53	6.83
Leon.....	19,837	1.57	.05
Levy.....	8,603	7.09	2.90
Liberty.....	2,956	7.10	....
Madison.....	15,446	6.40	.12
Manatee.....	4,663	23.08	5.57
Marion.....	24,403	8.85	.28
Monroe.....	18,006	36.26	14.43
Nassau.....	9,654	8.39	3.21
Orange.....	11,374	11.25	7.12
Osceola.....	3,444	22.06	6.67
Pasco.....	6,054	12.55	3.46
Polk.....	12,472	5.13	3.92
Putnam.....	11,641	16.82	10.39
Santa Rosa.....	10,293	11.65	2.91
St. Johns.....	9,165	14.18	1.63
Sumter.....	6,187	10.18	3.87
Suwannee.....	14,554	1.99	....
Taylor.....	4,000	5.25	.25
Volusia.....	10,003	2.23	6.08
Wakulla.....	5,149	6.40	.38
Walton.....	9,346	5.67	1.17
Washington.....	10,154	11.51	.98
Total.....	528,543	8.72	5.27

TABLE of deaths by age and color as reported to State Board of Health in 1905.

AGES	WHITE		BLACK		Total	Months	Deaths
	Male	Female	Male	Female			
Under 1 year...	92	74	67	63	296		
From 1 to 5....	37	64	63	35	199	January.....	304
" 5 to 10....	45	17	24	23	109	February....	296
" 10 to 15....	36	34	25	26	121	March.....	253
" 15 to 20....	80	47	51	40	218	April.....	258
" 20 to 25....	55	56	52	46	209	May.....	233
" 25 to 30....	45	51	45	43	184	June.....	229
" 30 to 40....	88	72	58	56	274	July.....	214
" 40 to 50....	67	64	48	45	224	August.....	201
" 50 to 60....	74	66	44	40	224	September..	220
" 60 to 70....	87	70	38	35	230	October.....	245
" 70 to 80....	84	61	33	37	215	November...	185
" 80 to 90....	39	26	27	16	108	December...	150
" 90 to 100....	3	6	1	3	13		
Over 100....	0	0	1	3	4		
Not stated.....	52	35	43	30	160		
Total.....	884	743	620	541	2788		2788

TABLE showing number of births, deaths, and marriages, and deaths from nine chief diseases, as reported to State Board of Health for 1905.

COUNTIES	BIRTHS		DEATHS		MARRIAGES		Consumption	Diphtheria	Scarlet Fever	Malaria	Typhoid	Measles	Pneumonia	Smallpox	Yellow Fever	Population
	W.	B.	W.	B.	W.	B.										
Alachua	119	77	24	14	60	135	3			2			2			32,245
Baker	60	25	8	2	22	17	1									4,512
Bradford	95	31	28	7			2				3		1			10,295
Brevard	57	20	25	6			2			1						5,158
Calhoun	33	12	5	4					1	1						5,182
Citrus	12	0	6	1												5,391
Clay	6	5	5	1	41	36										5,635
Columbia	37	36	14	7	80	154			1				3			17,094
Dade	67	26	32	3	59	102	2				1					4,855
DeSoto	67	9	36	6	179	49	3		1	2			3			8,047
Duval	498	553	391	640	1		7				4		3			39,733
Escambia	383	270	258	255	223	231	35			7	19		29		81	28,313
Franklin	13	19	5	0						1						4,890
Gadsden	44	90	83	68	13	30	27			5	8		2			15,294
Hamilton	30	17	4	1						2	2		1			11,881
Hernando	6	3	4	5						1			1			3,638
Hillsborough	119	3	46	7			1	14		6	4		2			36,031
Holmes	31	2	0	0	1	1										7,762
Jackson	114	53	15	3	45	47				2	1		2			23,337
Jefferson	11	49	2	2	48	20										16,195
LaFayette	39	2	0	1	53	41										4,987
Lake	55	18	34	5	40	61	4			1						7,467
Lee	58	2	20	1			1									3,071
Leon	8	23	1	0	40	212										19,887
Levy	31	30	14	11	70	104							2			8,603
Liberty	7	14	0	0	18	10										2,956
Madison	21	78	1	1									1			15,446
Manatee	99	9	24	2			3			2			1			4,663
Marion	39	177	7	0	112	260	1									24,403
Monroe	288	265	158	102	158	87	40	1	1	4	8		3			18,006
Nassau	18	63	14	17			4						4			9,654
Orange	63	65	68	13	65	112	9	2			2		3			11,374
Osceola	68	8	17	6	32	17	4			1	1					3,444
Pasco	68	8	16	5	72	51	1						2			6,054
Polk	65	9	39	10			2				1					12,472
Putnam	109	87	79	45	21	20	11				4		6			11,641
Santa Rosa	86	34	17	13	131	83	2			1			2			10,293
St. Johns	92	38	7	8			2			1	1		1			9,165
Sumter	44	19	17	7	35	21	2			2	1		1			6,187
Suwannee	20	9	0	0												14,554
Taylor	17	4	0	1												4,000
Volusia	22	7	49	12	21	28	1	1			1					10,003
Wakulla	22	11	1	1												5,149
Walton	29	23	7	4									1			9,346
Washington	99	28	8	2	27	14					1					10,154
	2270	2331	1589	1199	1667	1841	170	18	1	42	65		76		81	528,543

1906
(18th Annual)

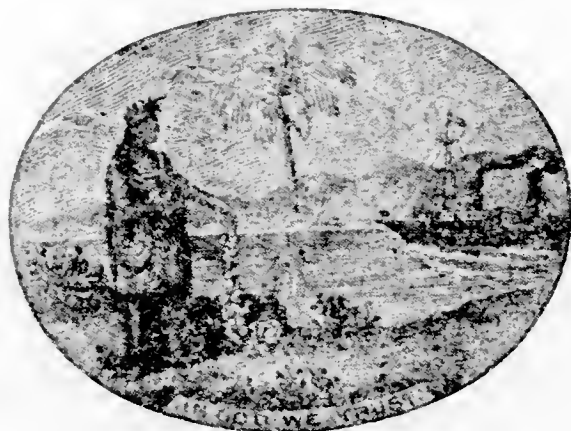
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EIGHTEENTH
ANNUAL REPORT

OF THE

State Board of Health
OF FLORIDA

For 1906



CAPITAL PUBLISHING COMPANY,
State Printer.
Tallahassee, Florida.

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DR. EDUARDO ANDRADE.

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TALLAHASSEE, FLA.
1907

LETTER OF TRANSMITTAL

Tampa, Florida, Feb. 12, 1907

*To His Excellency, N. B. Broward,
Governor of Florida,
Tallahassee, Fla.*

Dear Sir:

Complying with the Statutes of the State, which require that the President of the State Board of Health "Shall make an annual report to the Governor of all expenditures, in a clear and concise statement, together with any special observations, recommendations, or facts that he may present, that would be conducive to the health and sanitary conditions of the State," I take pleasure in handing you herewith a report of the transactions of the Executive Office of the State Board of Health for the past year, the same being a narrative as presented by the State Health Officer of sanitary conditions and facts prevailing in the State during the period named, as well as an account of all the funds received and the purposes for which expended.

The Board congratulates the people of the State upon the most excellent health conditions which have prevailed during the past year and ventures to express the belief that no little part of this escape from sickness and bodily disorder is due to the advice offered by the Board for years past and especially within the immediate present, for the correction of evils in sanitary management and hygiene which have been scientifically demonstrated to produce disease. The interest taken by the people in escaping the bites of mosquitoes and the annoyance of flies,

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by screening their homes, has contributed largely, the State Health Officer says, to the escape from attacks of malarial fever, which were formerly looked upon as necessarily following the heated term of our long summers.

My colleagues and myself do not consider it necessary to add anything to the Report of the State Health Officer, except to ask your serious consideration of two subjects mentioned in the report which we think deserve most careful thought on your part and for which we ask your approval and influence, that the suggestions may be made effective by proper enactments, when the incoming Legislature meets in April of this year.

The State Health Officer recommends and suggests the acceptance by the State, through the State Board of Health, of the generous offer of Dr. John E. Ennis of Narcoossee, in this State, to donate his land holdings and buildings now being operated by him as a private sanitarium to the State Board of Health, for an open-air consumptive retreat, not only for the indigent of this class of the State's sufferers, but also for any who might wish to accept the charity of the State in this respect. You will doubtless remember that comment was made upon the beneficial results to be expected from this Consumptive Home in the Board's last communication to you, inclosing the Annual Report for 1905, when the scheme of Dr. Ennis was approved of and the Doctor highly commended for his philanthropy. The Doctor is advancing in years, and having once himself been a sufferer from this fatal malady, but regaining his health from Nature's healing properties in the climate of Florida, he has tried, with the slight assistance he has been able to get from charitable organizations of the North, to conduct an open-air home for consumptives; but his funds being limited and his years advancing, he has thought it better to enlist the sympathy of the State, through the State Board of Health, to carry on this work, which necessarily involves some expense and probably more means than the Doctor himself can furnish.

My colleagues and myself approve of the recommenda-

tions of the State Health Officer, to accept this offer, and ask that you assist in inducing the Legislature of 1907 to either make an appropriation for this purpose, to be expended through the State Board of Health, or to enlarge the powers of the Board, by authorizing the expenditure of a sufficient sum from the State Board of Health funds to determine, as the State Health Officer says, the practicability of permanently establishing a charity of this kind in Florida.

Another subject which is worthy of your careful consideration and which meets with the hearty approval of my colleagues and myself is the appointment of a Consulting Sanitary Engineer, who would be at the service of the Board, to visit localities in the State where it has been determined to institute water works and sewerage. The State Health Officer sets forth the reasons for making this recommendation and request so clearly that I think it is not necessary that I should enlarge upon what he has already said; but the necessity for this addition to the Board's executive force is apparent when it is considered that oftentimes communities enter into contracts for the construction of water works and sewerage without having any knowledge whatsoever of the topography or geological formation of the locality where such public utility is to be constructed. A retrospect of the past clearly demonstrates, I think, that had some towns in the State consulted the State Board of Health before proceeding to drive wells and institute a system for the disposal of domestic waste, not only would much sickness have been prevented, but valued lives would have been saved, by averting an epidemic of typhoid fever, which followed the improper construction of water and sewerage systems. I certainly think that measures of this kind which involve so much that is of value to the citizens, in health and life, as the construction of waterworks and disposal of sewage, should not be undertaken without due consultation, advice, approval and authority of the State Board of Health; and that the Board may be able to furnish the best expert knowledge on this subject, it

should have the scope of its usefulness extended by the Legislature, so that it can render capable assistance of this character.

My colleagues and myself approve the recommendation of the State Health Officer to designate the administration of health affairs in the State by other terms than now employed, namely—it would prefer to have its usefulness in sanitary matters known as the "Department of Health of Florida," and its executive officer, as "Commissioner of Health." This practice is followed by many other States in the Union and has a meaning, aside from its euphony, which is in better keeping with the purposes of the public health organization.

Respectfully,

(Signed) E. M. HENDRY,
President State Board of Health.

REPORT OF STATE BOARD OF HEALTH.

Jacksonville, Fla., January 1, 1907.

*To the President and Members of the State
Board of Health of Florida:*

Gentlemen:

In presenting the Eighteenth Annual Report of the Executive Office of the State Board of Health, it is pleasing to invite the attention of the people of Florida to the very satisfactory and excellent health conditions which prevail in the State at the close of the year 1906. The Executive Officer notes this gratifying situation with thankfulness, and makes special mention because any credit acquired in health management during the past year has, it is thought, been due more to an absence of unhealthful circumstances and disease-producing agents, which the teachings, warnings and efforts of the Board in former years have tended to avert, rather than to a more active work of control, such as confronted the Health Department during the year 1905.

From reports received, which here follow, it cannot fail to be noticed that less malaria prevailed in the State and that sickness and deaths from this disease have shown a marked decrease. The number of cases of small-pox reported during 1906 was 356; during 1905, 1,193 cases; and in 1904, 973 cases: from which it will be seen that the prevalence of this disorder during 1906 was markedly diminished as compared with the two preceding years.

INTENTIONAL SECOND EXPOSURE

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DR. HIRAM BYRD,

First Assistant to State Health Officer, in Charge of the
Jacksonville Office of the Board.

Dr. Joseph Y. Porter,
State Health Officer,
Jacksonville, Fla.

Dear Doctor:

I have the honor to hand you herewith my report as First Assistant to the State Health Officer, for the year 1906.

Office
detail.

After the death of the late Mr. Durrance and our return from Pensacola, November 22, 1905, I was detailed to duty in the office. There are two clerical assistants, one having charge of the vital statistics and vouchers, the other being stenographer and filing clerk.

The first of the year found us in the midst of preparation of the Annual Report for 1905, which, owing to the late prevalence of yellow fever, was unusually lengthy and proportionately laborious. The first two months were thus consumed.

After the annual meeting, which was postponed until the 6th of March, the details of getting the report printed, proof-reading, mailing out, etc., devolved upon the office, which consumed another six weeks.

Revival of
"Health
Notes."

This done, the spring was wearing on and preparations were accordingly made to resume the publication of The Florida Health Notes, which publication had been suspended after the great fire of 1901. This was revived in July, and has since been kept up, a sixteen-page bulletin of information along sanitary lines, being issued monthly. A minor portion of the editorial work, together with the proof-reading and other details incident to getting it out, devolved upon the First Assistant.

Duval,
County
Agent.

In June, 1906, it was thought expedient to abolish the position of Agent State Board of Health for Duval County. The duties of that office thenceforth devolving upon the First Assistant to the State Health Officer, a report as County Agent will be found in its proper place.

Vaccina-
tion.

During the year some fifteen hundred persons have applied for vaccination at the office of the State Board of Health. The Duval County Board of Education requir-

ing of all school children certificates of successful vaccination from the State Board of Health, the duty of examining scars and issuing such certificates has likewise devolved upon the First Assistant. More than two thousand certificates of successful vaccination have accordingly been issued. It is pertinent to insert just here the following, published in the February number of Health Notes:

"The State Board of Health has recently been called upon many times for vaccination certificates upon the grounds that the applicant had been vaccinated two or more times and it did not 'take.' In some cases they acted in good faith, believing they were natural immunes. In other instances they were simply trying to evade the regulations, and would show temper when informed that *the Board issues certificates only to those who have actually been successfully vaccinated* and are honestly entitled to them.

But in any event, here is a modicum of information that is not found in any of the books and is worth knowing, namely, that virus loses its potency in a warm latitude much more rapidly than it does in a cold country, and likewise virus maintains its potency much longer when kept on ice than it does at room temperature. Virus put in the Northern laboratories is tested for that latitude and labeled accordingly. But when sent down here it becomes inert from one to six weeks sooner than it is labeled to expire, and especially is this true in the summer.

"Before we stumbled upon this fact, we used virus right up to the time it was labeled to expire, and, as a result, of course, we got no 'takes' after the virus had been kept here a short while, even though, judging from the label, we supposed it was still fresh. But now we *get virus in small quantity, keep it on ice until used, and do not use it after it loses its potency; consequently, our vaccinations are successful, even though the applicant has been vaccinated unsuccessfully any number of times. Our uniform success leads us to believe there are no natural immunes—or, if there is such a thing as a natural immune, they rise so scattering we do not count them in actual practice.* We have come to know that when primary

vaccinations are properly done and they do not 'take,' it is the fault of the virus and we go for the makers. The laboratories also recognize that the failures are due to the virus and not to natural immunity, and they replace all virus that fails to "take" in primary vaccinations."

Though a few unscrupulous individuals have tried various and sundry methods to get certificates and to get other spurious certificates endorsed, yet it is needless to add that the integrity of the State Board of Health has been maintained and *in no instance* has a certificate been issued when it was not believed to be honestly merited.

Mosquitoes. For lack of time and a suitable place to breed them, the study of mosquitoes has not been prosecuted so vigorously as in the past, and, as it is hoped, may be in the future. Only four new species, that is species not previously reported from this State, have been added during the year, namely:

Grabhamia Jamaicensis, Theob.
Culiseta consobrinus, Desv.
Uranotaenia sappharina, O Sack.
An unidentified species.

This brings the total number of species now known in Florida up to twenty-seven.

Stegomyia callopus.

In this connection it is proper to state that the name of the *Stegomyia fasciata* has lately been changed in accordance with the international rules of zoological nomenclature, and this mosquito will henceforth be known as the *Stegomyia callopus*.

Assistants to the State Health Officer.

In the fall of 1905, Dr. E. W. Diggett, Assistant to the State Health Officer, resigned, and Dr. Byrd being transferred to the office, left only one assistant in the field—Dr. R. F. Godard—who also resigned early in 1906. A competitive examination was called for December 18th, 1905, to fill the two vacancies. This examination, though held in 1905, was not mentioned in last year's report, and as it and its sequences were more closely connected with the subsequent year, it is thought proper to report it here.

The Board of Examiners appointed for this purpose consisted of the late Dr. Eduardo Andrade, chairman; Dr. J. D. Fernandez and Dr. Hiram Byrd. When it was

found that Dr. Fernandez could not serve on account of an intended absence from the city at that time, Dr. C. E. Terry was appointed in his stead.

The conditions under which physicians are allowed to compete for the appointment are that they must be practicing physicians in this State and must be members in good standing of the County, State and American Medical Associations.

The required grade to get on the eligible list is 85 per cent. The appointments are made from the highest on the line. The following is a list of the questions asked at the examination just mentioned:

EXAMINATION FOR APPOINTMENT AS ASSISTANT TO THE STATE HEALTH OFFICER.

PERSONAL PAPER.

1. Give full name, address, age, nativity, married or single.
2. From what institutions of learning are you a graduate and give date of diploma.
3. What hospital experience have you had and where have you practiced?
4. What scientific papers have you read and published?
5. Of what medical and other scientific societies are you a member?
6. In what States have you license to practice medicine?
7. What experience have you had in the management of contagious and infectious diseases?
8. Against what diseases are you immune?
9. What other employments have you been engaged in besides practice of medicine?
10. How long have you lived in Florida?

GENERAL EDUCATION AND STATE AND DOMESTIC SANITATION.

1. Describe the transmission of malaria in detail.
2. What, if any, disease or diseases are transmitted by mosquitoes?

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10. How long have you lived in Florida?

GENERAL EDUCATION AND STATE AND DOMESTIC SANITATION.

1. Describe the transmission of malaria in detail.
2. What, if any, disease or diseases are transmitted by mosquitoes?

3. What is your opinion of the prophylactic and therapeutic value of diphtheria antitoxin? What is the rationale of its use?

4. What relation does decaying vegetation and stagnant water bear to "fever?" How may families best protect themselves against chills and fever during the summer?

5. How do you account for sporadic cases of diphtheria and other contagious diseases? (This has reference to origin.)

6. Describe the Widal reaction and interpret results.

7. Name varieties of malarial parasites and describe technique for their demonstration in stained preparations.

8. Describe technique of staining for tubercle bacilli.

9. Name cause and describe ways in which typhoid fever may be transmitted.

10. What disease may be confounded with smallpox? Give the characteristic symptoms of Variola, chronologically, to and including the appearance of eruption.

11. What is meant by the term "intermediate host," in the transmission of disease? Give two examples and the disease referable to each.

12. Name five diseases requiring quarantine regulations, and state the time necessary for each.

13. Define the terms: Disinfectant, Antiseptic, Germicide, Deodorizer, and mention one example of each class.

14. How would you proceed to make a thorough chemical examination of a specimen of urine suspected to contain albumen and sugar?

15. Of the infectious diseases, state which are accompanied or preceded by an eruption of the mucus membrane of the mouth or pharynx.

ORAL EXAMINATION.

1. Define bacteria and explain briefly their role in the world economy.

2. State how long after an attack of diphtheria should the patient be considered infectious.

3. Name cause and describe manner of transmission of Cholera and Bubonic Plague.

4. Define immunity.

5. What constitutes an epidemic of a given disease?

6. Name the various disinfectants in general use and describe the method of employment and the applicability of each to particular conditions.

7. What is the known maximum period of incubation in yellow fever, and what measures would you institute for the public safety in a case seen by you before the fourth (4th) day of illness.

8. When a community is obliged to use cistern for storing potable water supply, in the latitude of Florida, what measures are required to protect the public health from diseases dependent on that condition?

9. How would you determine whether a water supply was safely potable?

10. What do you understand by mortality and morbidity statistics and what is meant by the "death rate" and how is it computed? Give an example of the latter in figures.

Twelve applicants took the examination, three of whom made the required percentage: Dr. C. T. Young, of Plant City; Dr. R. E. Chalker, of Lake City; and Dr. C. R. Wilcox, of Palatka (now of St. Petersburg). Upon the recommendation of the Examining Board, Drs. Young and Chalker were appointed to fill the two vacancies. And later on when Dr. Godard resigned, Dr. Wilcox was appointed to succeed him.

During the year two examinations for Embalmer's License have been held, one in May and another in October. The Board of Examiners for the first consisted of the late Dr. Eduardo Andrade, chairman; Dr. Hiram Byrd, and Mr. Chas. A. Clarke, president State Funeral Directors' Association. The following is a list of the questions asked:

Embalmer's
Examinations.

EXAMINATION FOR EMBALMER'S LICENSE.

May, 1906.

Give full name, age and address.

State general educational qualifications.

Give experience in embalming.

1. Name the major and minor cavities of the body.
2. Name the organs contained in the peritoneal cavity.
3. Define the aorta and name seven of its branches.
4. Describe the portal circulation.
5. Given a drop of blood at some point in the arteries, as the aorta: Follow it in its course through the circulation till it gets back to the aorta.
6. Can the veins be used as well as the arteries to inject the extremities? If not, why not? If so, what veins would you use to inject the upper extremities?
7. Name the constituent elements of the blood.
8. Describe coagulation, using the terms plasma and serum correctly.
9. Under what conditions may bodies be shipped without being embalmed?
10. Name the diseases that persons dying of can not be shipped.

TECHNIQUE.

1. What is embalming? How many methods are taught?
2. How soon after death is it proper to embalm a body?
3. What diseases are the cause of most trouble to embalmers?
4. Describe purging. What is the cause and remedy?
5. How should a body dead of contagious disease be encased for transportation?
6. Describe how to raise and inject the Axillary artery.
7. What is cavity injection? Describe how it is done.
8. How much blood should be drained from a body weighing 150 pounds?
9. Name the organs of the Thoracic Cavities.
10. Name the arteries which supply these organs.

BACTERIOLOGY.

1. Define bacteria and name some of their shapes.
2. Describe decomposition of animal matter; give its cause and state circumstances that favor it.
3. How would you disinfect the room where a person had died of yellow fever?
4. What precautions should a non-immune take while

handling a body that had died of yellow fever, to avoid contracting the disease himself?

5. Name some diseases known to be transmitted by drinking water?
6. Define an antiseptic, a disinfectant and a deodorizer.
7. State how much sulphur should be burned to disinfect 1,000 cubic feet of space.
8. Name five communicable diseases.
9. Name some of the chemicals more generally employed as disinfectant and give the strength of the solutions in which they should be used.
10. Name the cause of diphtheria, malarial fever and cholera.

Thirteen applicants took this examination, only four of whom made the required 75 per cent.

The October examination was conducted by Dr. Hiram Byrd, acting chairman; Mr. Clarke and Dr. Holloway. Four applicants took this examination, two of whom passed.

During the year I have been detailed to investigate and report upon special diseases or conditions a number of times. The following report upon the sanitary condition of the Florida East Coast Railway Extension is given, hoping that it may be of general interest:

Inspection
F. E. C. Ry.
Extension.

Jacksonville, Fla., Sept. 19, 1906.

Dr. Joseph Y. Porter,

State Health Officer,

Jacksonville, Fla.

Dear Doctor:

I beg to make the following report on the sanitary condition of the labor camps on the Florida Keys where the F. E. C. Ry. is being extended from Miami to Key West.

As you are aware, after passing Miami, the railroad extends to Homestead on the mainland; there it jumps across to one of the keys, and from there on down to Key West, it is surveyed to pass along from key to key. Supplies are transported from Miami on barges, towed down by steamers, the *St. Lucie*, length 122 feet,

draught about four feet, being one of the largest of these steamers.

The first camp after crossing Biscayne Bay is the Jew Fish Creek. This camp is on an island where considerable filling-in is being done not only for a roadway, but for the docks. The laborers live in a houseboat.

Water is supplied from Miami, being towed in tanks on barges. The houseboat is thoroughly screened against mosquitoes.

At other places down the line, some of the laborers live on houseboats and some on land. At Camp Six (6), on Long Key, for instance, I believe they all live in tents on the land. At Knight Key, most of them live in a houseboat. This houseboat was under the charge of Mr. Coe, and may be described as a type of the houseboats used all along. It has accommodations for about one hundred and thirty-five people; is thoroughly screened from top to bottom; the latrines so constructed that the discharges empty into the water; and the supplies, as all others are, are brought down from Miami and stored in a cabin or commissary department; together with plenty of ice, making the accommodations reasonably comfortable. There is one feature of the houseboat that was new to me, viz., the mattresses. These are made of sponges. Sponges, we know, are of animal origin, and, when kept in a damp place (and the houseboat is more or less damp) will absorb moisture and will pack and will give rise to a slight odor, not anything pronounced or disagreeable, but, nevertheless, the odor of sponges. That is the condition that most of the beds are in. In the light of our present knowledge, I see no immediate danger in these sponge mattresses.

The water supply being satisfactory, and the excreta satisfactorily disposed of, there is no danger from typhoid fever. The houseboat being freely screened, there is little or no danger from malaria, and as the laborers are nearly all vaccinated, the danger from smallpox is also at a minimum. Upon the whole, I do not see how the sanitary conditions of the enterprise could be any better.

Of the mosquitoes prevailing down there, I captured a few specimens, all of which seem to belong to two species: the *Culex Taeniorhynchus*, and another which I have not as yet identified. The *Culex Taeniorhynchus* is the

salt-marsh mosquito, which prevails all along the East Coast, and which further north is somewhat supplanted by a closely allied species, the *Culex Sollicitans*. In New Jersey the *Sollicitans* is more abundant than the *Taeniorhynchus*. We would not expect any fresh-water breeders along the coast, because there is so little fresh water found in that section. Some of the larger keys have, of course, a few human habitations, and consequently, some fresh water supplies, and in such places I have no doubt that the fresh-water breeders would abound if once introduced. My observations were too cursory to say whether or not they actually exist there, but from the general conditions they would certainly not be expected in any considerable numbers.

Respectfully,

HIRAM BYRD,

First Assistant to State Health Officer.

The following report upon an eruptive disorder, which I have encountered here and there in the State, is also given in full. I regret that I could not make a closer study of this. In future, if opportunity presents, I hope to look more closely into it:

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Dear Doctor:

On my recent trip down the Florida East Coast to Miami and the Florida Keys, where the East Coast Railway extension is being constructed, I beg to report that I encountered an eruptive disorder of somewhat unusual character. The first case of this eruption that I saw was at Kathleen, some three years ago. The attending physician diagnosed it as smallpox, and upon my arrival, found the case isolated and thought that the physician's diagnosis was correct. Two days later I saw the patient and finding the eruption still spreading, that is, new pustules forming, I became doubtful of the diagnosis and vaccinated the man. The vaccination took beau-

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tifully, proving conclusively that this was not a case of smallpox. In character, the pustules are somewhat like chicken pox, except that they all contain pus and that none of them contain a clear fluid. The base of the pustule is reddened very decidedly, and there is very little itching, but a good deal of pain. The pustules are irregular in size, varying from a pin head to a quarter of a dollar. They are also irregular in their appearance, coming sometimes first on the face, then on the body and limbs; but the favorite seat of eruption seems to be about the shoulders, back and limbs. The case in question at Kathleen had the genitalia perfectly covered. It is a very painful affliction, but is accompanied by no temperature or very little, and that is accounted for by the excessive amount of pus in the worst cases. For instance, the case at Kathleen had slight temperature after the first eruption spread almost completely over the body, being in most places semi-confluent, completely confluent in others, here and there discreet patches. That is the worst case I have seen.

The mildest case I have seen, on the other hand, was one seen in company with Dr. Jackson, of Miami, which had the eruption confluent only on the legs below the knees and discreet over the rest of the body, having perhaps a dozen pustules on the face. There are no prodromal symptoms, the first warning of the trouble being the formation of pustules. It seems to run a definite course, the worst cases lasting three or four weeks, the mildest somewhat less than two or three weeks. The surface is left perfectly smooth after the eruption is well, though usually tender and somewhat sore beneath; and more or less discoloration, which, after a time, passes off. It does not seem to be contagious, or at least only mildly so.

Only five or six cases so far as I know, have been reported at Miami, and the case mentioned at Kathleen include all that I know of.

Respectfully,

HIRAM BYRD,

First Assistant to the State Health Officer.

An important branch of the routine work of the office is the correspondence, which, while less than usual in 1906, amounted to an average of more than seven letters a day. Indeed this work has assumed such proportions that it has been found necessary to improve the filing facilities; the vertical filing system has accordingly been introduced, and the matter subdivided into the following departments:

- A. Executive Department; including all office matter proper, and all miscellaneous matter not included in the other departments.
- B. Department of General Sanitation; including the communicable diseases, sanitary nuisances, etc.
- C. Department of Scientific Research; including the work done in the laboratory.
- D. Department of Veterinary Medicine.
- E. Department of Vital Statistics.

Another important branch of the office work has been the supervision of expenditures. When it is remembered that the Board frequently has to employ persons for a special service and delegate to them the responsibility of disbursing limited amounts of the State's funds, and when it is remembered that there is a natural propensity on the part of the public to squeeze the public purse, it will be seen how necessary and withal how difficult it is to keep the Board from being imposed upon.

A specific example will not be out of order. A certain bill, amounting to nearly \$40 for nursing smallpox, was presented in proper form. Struck by the similarity of names, I wrote to inquire if patient and nurse were any kin, and found that this bill was for nursing her husband, in spite of the fact that groceries were furnished the entire family during the sickness. Not only is the closest economy insisted upon, but ways and means to reduce the expense of the Board are constantly sought, as are ways and means to increase its efficiency. For instance, when it was found that the First Assistant to the State Health Officer could, by extra effort, do the work of County Agent for Duval County, he assumed the obligations and

recommended the abolition of that office, whereby the State is saved that \$600 annually.

Respectfully,

HIRAM BYRD,
First Assistant to State Health Officer.

DR. C. T. YOUNG,

Second Assistant to the State Health Officer.

*The State Health Officer,
Jacksonville, Fla.*

Dear Doctor:

I have the honor to submit my report of transactions for the Board during the past year.

For the reason that all assignments, their management, etc., were reported with subsequent developments, in detail, at the time of occurrence, and because of a frank desire to avoid tedious repetition, I have summarized them into tabulated form.

The sanitary nuisances and inspection of cigar factories, however, are deserving of more than passing mention.

In traveling about the State, I have noticed a general awakening to the demands of better sanitation and the necessary improvement of all conditions influencing the public health.

Respectfully,

C. T. YOUNG, M. D.,
Second Assistant to the State Health Officer.

Town.	County.	Date of Charge.	Disease.	No. Cases.	White.	Black.	Fatalities.	Source.	Remarks.
Orlando.	Orange.	Jan. 10.	Syphilis.	1	1	0	0	.....	.....
La Crosse.	Alachua.	Jan. 18.	Smallpox.	1	1	0	0	Tampa Fair.	.....
Hague.	Alachua.	Jan. 22.	Smallpox.	3	3	0	0	Palatka.	.....
Lakeland.	Polk.	Jan. 27.	Smallpox.	5	5	0	0	Tampa Fair.	.....
Espanola.	St. Johns.	Feb. 7.	Smallpox.	3	3	0	0	S. Car.	.....
Cynthiano.	Lake.	Feb. 13.	Smallpox.	4	4	0	0	Lakeland.	.....
Ft. Meade.	Polk.	Feb. 21.	Smallpox.	13	13	0	0	.....	.....
.....	Polk.	Mar. 10-20.	Vital statistics.	4	4	0	0	.....	.....
Homeland.	Polk.	Mar. 20.	Chickenpox.	1	1	0	0	.....	.....
Tiger Bay.	Polk.	Mar. 20.	Impetigo, contagios.	1	1	0	0	.....	.....
Lakeland.	Polk.	Mar. 26.	Chickenpox.	1	1	0	0	.....	.....
Auburndale.	Polk.	Mar. 28.	Chickenpox.	1	1	0	0	.....	.....
Mascotte.	Lake.	Mar. 29.	Smallpox.	2	2	0	0	.....	.....
Pomona.	Putnam.	Mar. 31.	Smallpox.	3	3	0	0	.....	.....
Jennings.	Hamilton.	Apr. 12.	Sanitary nuisance.	.....	.....	.....	.....	.....	.....
Hawthorn.	Putnam.	Apr. 14.	.....	.....	.....	.....	.....	.....	Smallpox rumor.
Sarasota.	Manatee.	Apr. 16.	Smallpox.	1	1	0	0	.....	.....
St. Petersburg.	Hillsboro.	Apr. 28.	Smallpox.	1	1	0	0	.....	.....
Orlando.	Orange.	May 2.	Smallpox.	2	2	0	0	.....	.....
Apopka.	Orange.	May 9.	Chickenpox.	1	1	0	0	.....	.....
Hastings.	St. Johns.	May 15.	Smallpox.	1	1	0	0	Daytona.	.....
Tallahassee.	Leon.	June 4.	Smallpox.	5	5	0	0	.....	.....
Monticello.	Jefferson.	June 7.	Smallpox.	2	2	0	0	.....	.....

Town.	County.	Date of Charge.	Disease.	No. Cases.	White.	Black.	Fatalities.	Source.	Remarks.
G. Cove Spgs.	Clay.	June 20.	Sanitary nuisance.	1	1	0		.....	.....
New Smyrna.	Volusia.	June 21.	Sanitary nuisance.	1	1	0		.....	.....
Daytona.	Volusia.	June 29.	Smallpox.	1	1	0		.....	.....
St. Petersburg.	Hillsboro.	July 2.	Sanitary nuisance.	1	1	0		.....	.....
Tampa.	Hillsboro.	July 15.	Inspection of cigar factories	1	1	0		.....	.....
Tampa.	Hillsboro.	July 16.	Inspection of cigar factories	1	1	0		.....	.....
St. Petersburg.	Hillsboro.	July 4.	Sanitary nuisance.	1	1	0		.....	.....
Marianna.	Jackson.	Aug. 8.	Sanitary nuisance.	1	1	0		.....	.....
Tampa.	Hillsboro.	Aug. 18.	Inspection of cigar factories	1	1	0		.....	.....
Plant City.	Hillsboro.	Aug. 30.	Sanitary nuisance.	1	1	0		.....	.....
G. Cove Spgs.	Clay.	Oct. 13.	Pernicious malaria.	3	3	0		.....	.....
Jacksonville.	Duval.	Oct. 18.	Assisting in vaccinating at county schools.	2	2	0		.....	.....
Eustis.	Lake.	Oct. 20.	Chickenpox.	2	2	0		.....	.....
Tampa.	Hillsboro.	Nov 1-Dec 31.	Assisting Dr. Bartlett in roll call quarantine.	2	2	0		.....	.....
18									
Smallpox totals:									
No. of cases, whites.				No. of cases by counties:					
No. of cases, blacks.				7	Alachua.	1	Manatee.	1	.....
No. of cases, total.				40	Polk.	18	Hillsboro.	1	.....
				47	St. Johns.	4	Orange.	2	.....
				47	Lake.	6	Leon.	5	.....
				47	Putnam.	3	Jefferson.	2	.....
				47	Volusia.	1	Volusia.	1	.....
				47					47

SANITARY NUISANCES.

On April 12, I was directed to go to this place to interview a gentleman living in the outskirts of town, who had complained to the Board against the authorities responsible for the neglected condition of the school house water closets, declaring that their proximity to his front porch, under certain atmospheric conditions, utterly wrecked the comfort of himself and family, and that their location (some 100 feet from his pump) was a constant source of peril through the danger of their contaminating his water supply. The presence of a drain at their border and faulty construction, affording a loathsome wallow for hogs, completed the disruption of his aesthetic feelings and physical well being.

Looking the ground over, I found that he had been both patient and long suffering. The school was a large one; its closets located as in complaint, and were in bad sanitary condition. No attention at all appeared to have been given to their cleaning and disinfection. The City Clerk told me that they had a Municipal Sanitary Committee, clothed with ample authority to abate and prevent the recurrence of the nuisance, and that the present condition was due to their negligence.

The dumping of a few loads of sand to prevent the water from the drain standing around them, the construction of a trap door at their rear to obviate the hog part of the nuisance, and a strong insistence that they rigidly enforce all sanitary laws, were recommended.

During the early part of June, attention was called by Dr. Edwards, County Health Officer, to a lot in the northern section of the business portion of this town which was covered with water all the way from one to four inches in depth, and strewn with barrels, boxes, brush, scrap iron, cans, bottles and an old, overturned water closet. On the south side there was a continuous row of buildings, consisting of a stable, storeroom, and water closet. The water over the pond was discolored by seepings from the stables, and the smell of manure was quite detectable all about it. At the southeast corner, the water from the adjoining land and streets drained into the pond, so that the condition was maintained for

Jennings,
Hamilton
County.

Green Cove
Springs,
Clay
County.

several weeks in the year. Neighbors living around united in a protest against its unsightliness and mosquito-breeding capacities.

Continuing my inspection to other portions of the town, it was seen that the drainage of the entire town, with the exception of a portion of the residential section in the northern part, was grossly insufficient. The surface ditches were overgrown with grass, with water standing in pools throughout their course. Dog fennels and weeds grew along public streets and vacant lots in wild profusion. The yards of a number of private residences were strewn with waste paper, bottles, cans and unsightly refuse.

Instead of having that one man fill up his lot and thus remove an eyesore, it was my pleasure to assist the doctor in his fight for sanitary betterment, by recommending to the State Health Officer that the town take the subject of general drainage as a matter of prime importance, grade a number of streets and fill in the vacant lot.

Green Cove Springs is a beautiful gem in a verdant setting, lying on the banks of the St. Johns, a short distance from Jacksonville. If the touch of the hand of man were as evident as the great kindness of Nature, it would be the prettiest resort in the State. Visiting the place later, it was very gratifying indeed to note the careful manner in which the suggestions of Dr. Porter had been carried out.

New Smyrna,
Volusia
County-

The Mayor and Council of New Smyrna, acting under advice of their City Physician, Dr. L. B. Bouchelle, complained to the Board that the F. E. C. R. R. Co., were maintaining a sanitary nuisance, in the shape of a pond lying between the tracks of their "Y" in the southern section of the city. There being no culverts or drainage to this body of water, it remained during the entire rainy season a menace to the public health through its activities as a mosquito breeder.

On reaching the city on June 21st, I was informed that Mr. Goff, an official of the road, had appeared before the Mayor and Council assembled, gone over the question in detail, advised that he be allowed to send an engineer to look over the ground and decide upon the most practicable plan for the complete drainage, which he promised would be accomplished at an early date.

A protest against, with an appeal for relief from, an abuse, came from a real estate owner, who claimed that the city was using as a dumping ground a marshy tract of land lying on an eastern suburb; that it was covered with unsightly waste, decaying vegetable matter, etc.

The stench arising from it occasioned considerable discomfort to all neighbors. Furthermore, he was fearful lest it be the cause of an epidemic of illness.

Driving out to the spot on July 31st, I found a low marsh, partly covered with water and sawgrass, comprising in all about ten acres, and ending in a small stream, which a little further emptied into the bay. Strewn here and there over its surface were blackened tin cans, ashes, bottles, etc. The whole tract, I was told, was completely submerged daily, at high tide. No decaying or other unsightly refuse was to be seen anywhere over its extent. In a conversation with the Mayor, Mr. Northrup, I was informed that the city had stopped dumping waste in that section some weeks before, and at the conclusion of its use as such, the whole lot was saturated with kerosene and the refuse burned. Then an ordinance was passed making further use of it as such, punishable by law.

The matter was reported in detail without recommendation.

August 4th I again visited St. Petersburg, in response to a petition referred from the office for full investigation. The complaint stated that two gentlemen owning property in the northern section of the place were maintaining a sanitary nuisance in the shape of a cesspool, which abuse had reached a condition demanding immediate attention, since it had become the source of supreme discomfort to all the signers. Visiting these last mentioned, I was told how many of them were forced to leave home at the cleansing time; how others became ill; and when the wind was favorable, how many were discomforted for hours. Some were fearful lest its proximity contaminate their water supply; others, that it would be the cause of an epidemic of sickness, one making specific charges against the sanitary department of the city for not cleaning it regularly; mentioning a time when the pool overflowed and a stream of stereoraceous effluvia wended its way along her back fence, compelling her to close the doors and windows and sit with disgusted and outrage feelings within.

St. Petersburg,
Hillsboro
County.

St. Petersburg,
Hillsboro
County.

In company with the heads of the sanitary and police departments and the owners of the property, I visited the scene of the discord. Walking aroundabout and standing over the pool, no odors was detected, neither was there when the top was removed. The pool proved to be a wooden tank sunken into the ground, tightly swollen, under a temporary permit from the Council pending the extension of the sewer main. Stirring the brownish coagula about, it was found to be about four inches thick; beneath this was clear water; the only smell was that resembling sour dishwater.

The Chief of Sanitation informed me that he watched the pool emptied and disinfected it as often as necessary. The city authorities stated that they had been delayed beyond expectation in the extension of the mains, but hoped that if the rainy weather did not prevent too much, to have it completed in a few weeks, and as the gentlemen owning the property were anxious to abolish the pool, I did not deem action on the part of the Board necessary.

Plant City,
Hillsboro
County.

August 30th, Mr. E. T. Roux of this place reported that the S. A. L. Ry., in throwing up dirt for their road-bed, had left a large ditch, some six feet wide by three feet deep, and extending the length of two blocks on either side of the track, in the southern part of the town. These excavations were full of water for the greater portion of the year, and, on account of the peculiarity of the topography of the section, it was impossible to drain them without considerable expense. Consequently, they had remained for years, playing the part of mosquito breeders, to the menace of the health of all the adjoining people in that section. Examining the scene of the complaint in detail, I found the unsightly ditches filled with dirty water, which was covered with a greenish scum. The one on the left-hand side of the track ran along the front fences so that people, in order to get into their houses, had built small bridges from their gates to the track. Finding evidence to sustain the protest and the town's unsuccessful attempt to drain them, I recommended that the railway company be ordered to fill them in.

This was done a few months later by the dumping into the ditches of several trainloads of dirt. This, in turn, was leveled over by the section hands, thereby obviating the nuisance and improving very materially the appearance of that section of the town.

INSPECTION OF THE CIGAR FACTORIES AT TAMPA.

Acting upon the following letter received from the office:

"Jacksonville, Fla., July 9, 1906.

Dr. C. T. Young,
Second Assistant to State Health Officer,
Plant City, Fla.

Dear Doctor:

From the inclosed correspondence, you will see that Dr. Porter has instituted a crusade against the unsanitary conditions of cigar factories in Key West, and that he desires the same thing extended to Tampa and West Tampa.

You will please go to Tampa and remain there several days and see that all of the cigar factories are put in first-class sanitary condition; and that at least one cuspidor to every two operatives be furnished; and furthermore, that those cuspidors shall be used.

The State Health Officer is determined that a high standard of excellence in the sanitary condition of these industries shall be maintained. You will probably not have any trouble in bringing this about when you show the owners that it will brand their goods for them to have to be dragged into the courts on such a charge.

Kindly inform the office of the condition that you find things in, as well as the progress made in correcting the evils.

Incidentally, you will please look after fruit and vegetable stores and meat markets, and if you find any of them in bad condition, not only call their attention to such officially, but report to the City Health Officer as well as the State Board of Health.

By direction of the State Health Officer, I am,

Yours very truly,

HIRAM BYRD,

First Assistant to State Health Officer,"

I proceeded to Tampa to take up these matters as requested. Arriving there, I found that Dr. C. W. Bartlett,

County Health Officer, had, a few days before, acting under advice from Dr. Porter, sent a notice to the factories giving them warning that in all rooms where tobacco was handled they would be required to furnish a cuspidor to every two operatives. These were to be cleaned once a day and supplied with a disinfectant solution. Promiscuous expectoration about the floor, stairways and elsewhere in the buildings would be held an offense punishable by law. Their premises were to be put in as cleanly a condition as possible.

On visiting the manufactories, I found all those in authority thoroughly in accord with the endeavors of the Board and appreciative of the necessity for the crusade. Examining the rooms where the cigarmakers were at work, the immediate need of the inspection was quite apparent.

Seated in a superheated room, amidst an atmosphere heavy with the odor of tobacco, smoke of cigars and exhalations of the inmates, and peculiarly depressing and irritating on account of its lack of ventilation, were from one to 650 persons, all jabbering away while ostensibly engaged in the manufacture of cigars. Among them were Cubans, Americans, Spaniards and negroes, all apparently speaking the Spanish language. The effect of the intense heat was uniformly manifested in their disregard for top shirts. The floors were dirty, sandy and covered here and there by scraps of tobacco. Some of the operatives were chewing, and the expectoration had accumulated by the side of their chairs in small pools. Others, especially those about the aisles, had covered the surface of the space limited by their projective ability, with spittle. In finishing the cigars, I noticed they were accustomed to bite off the tapering end preparatory to putting the final touches on the wrapper. This fact would account for part of the unusual amount of expectoration among them and the filthy condition of the walls and floors as well. At the close of the day, the tobacco that has fallen on the floor, trodden under foot for hours and mixed in varying degrees with spittle, is swept up and in some instances sent off to smaller shops where it is used as filler for both cigars and cigarettes. The fear of injuring the tobacco in the department below is so acute that water, soap and a scrub broom are never used. You can easily imagine how unsightly they become in a short while.

The packing, stripping and filler rooms were all in perfect sanitary condition, easily explicable from the fact but few frequent them, and those who do are from among the better and more intelligent class of workmen. The halls and stairways leading to the main cigarmaking room bore the same evidence of reckless abandon and gross abhorrence for the demand of wholesome sanitation as did the former.

The sanitary condition of the premises was fair, cisterns mostly unscreened, closets modern and all but few connected with sewer main.

While the above is true of the majority, still there were a few who had their factories in fair condition, and two had the spittoons in use.

In the capacity of a friendly adviser, I visited them all, going over the requirements of the Board with the owners and foremen, talking to them about the necessity of putting them into immediate effect and the ultimate good that would come to all concerned from their continued strict observance. They were quick to see the good effects to accrue and all promised their hearty support.

As the spittoons were to be moved and cleaned daily, and as they were to contain a small amount of liquid disinfectant, it was necessary that they should be of durable quality and yet not so expensive as to entail a hardship on the factory men. After going over the merits of several, decided on the papier mache one, with a small wire screen over the top to keep out trash and tobacco.

The requirements of the disinfectant solution were that it should be efficient, inexpensive and odorless. In our opinion, Bichloride of Hg. 1-to-1,000 solution, met the demand, besides would have but little effect upon the spittoon.

A sufficient length of time was allowed to all for their installment. Mr. Columbus Bryan, sanitary patrolman, was directed to make weekly inspections, report progress, and where delinquents were found, push them up to the full compliance of the law.

In company with Dr. Bartlett, some three weeks later, I again inspected the factories. In almost all of them the promiscuous expectoration had decreased from 25 per cent. to from 3 to 5 per cent. The rooms were cleaner and everything presented a more inviting appearance. This was especially noticeable in all American managed factories. It was a pleasant sight to see floors shining in

their cleanliness that were before filthy and foul. In a few, however, the old condition was still apparent. Our threats of an indictment were met by pleas for more time and protests that arrests for violation among the cigarmakers would bring about confusion among the labor and perhaps a strike. They were advised to comply at once with the regulations and extra inspections ordered of their premises. Dr. Bartlett thought that if the State Health Officer would issue a certificate over his signature, stating that the factory was subject to weekly inspection and was in good sanitary condition, that this would help the sale of their cigars, besides acting as an incentive to the manufacturers to continue their efforts for better sanitation.

It was also agreed that legislation excluding tuberculous people from factories, and the subjection of others in whom the disease was suspicioned to a rigid physical examination, and if positive result was obtained, exclusion would be a great boon to the work.

During my service on the roll-call quarantine, I again inspected all the factories. On account of the demand upon the time of everyone connected with the Board by this last mentioned work, there had been no opportunity to visit them for two months.

The larger factories were found to be in the same condition as formerly, but some of the smaller ones, as a result of the enforced neglect, appeared to have sunken farther than formerly in the mire of sanitary disregard. A personal plea was made to every offender to restrain from the above, with a promise of severe measures in the future, should they persist in the abuse of the regulations. The subject was again gone over in detail with the "reader," who at our request spoke at some length in Spanish to the cigarmakers. During the last two months some 1,300 new men had come over from Cuba. For the benefit of these, the State Health Officer was advised that in our opinion it would be well to have the regulations on the subject printed in both English and Spanish and posted in conspicuous places about the buildings. Furthermore, we recommended that the sanitary patrolman be directed to make weekly inspection of all factories, and in those where a violation was found, arrest at least two of the offenders and have them placed under

bond—this for its sanitary effect upon the others. All this we considered absolutely essential for the future successful conduction of the work.

ROLL-CALL QUARANTINE.

During November and December I was engaged in this service with Dr. C. W. Bartlett, agent for the Board. The Doctor's report contains all the data and covers completely, the entire ground of the inspection, together with a discussion of what we regarded as an inefficient system of detention a frail barrier indeed against the invasion of much-dreaded contagion.

CHICKEN-POX.

From the fact that this is a disease confined to childhood, mostly appearing without prodromal symptoms, and characterized by an eruption of an extremely mild type, ending, except in very rare instances, in a rapid recovery, it is scarcely ever given a serious thought by the medical man of to-day. Varicella.

Yet perhaps there is no disease of the Southern clime, a knowledge of which is of more importance to the practitioner than that of chicken-pox. Scarcely a season passes without the family physician having to deal with it, and hardly a week elapses but that the agent of the Board is called upon to differentiate between it and markedly similar eruptions of a more virulent type. Its detection or recognition is oftentimes most difficult, and at some phases of its course, under certain circumstances, a matter of impossibility. So that it often becomes necessary for the diagnostician to suspend judgment, hold the patient for more deliberate observation, and patiently await the appearance of more characteristic phenomena. Failure to do this has been the cause of manifold errors, which fact is attested by the clinical records of almost every pesthouse or hospital for the treatment of contagious diseases in the country.

This confusion is mainly due to its treacherous resemblance to the milder and atypical forms of small pox that

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Varicella.

have in late years become so common in this part of the country, together with their simultaneous infection of the same territory or districts for the greater portion of the year.

Definition. Varicella is defined as an acute contagious disease limited mostly to childhood, characterized by an eruption of the maculo-vesicular type, appearing in crops and accompanied by a slight fever. The disease is of short duration, one attack being said to render the patient immune.

History. Just how long the disease has been in existence will probably never be known from the fact that with the early writers it was confused with smallpox. According to Welch & Schamberg, the Arabian physician, Rhazes, who lived in the ninth century, made mention of a spurious eruption that was not protective against epidemic smallpox. "The Sicilian physician, in a work entitled *Præternatural Swellings*, written about 1553, seems to have been the first to describe the disease in accurate terms. Morton's writings on the subject are of historic value, because, according to Gregory, "he remarks that the disease was vulgarly known as chickenpox. This is the first mention of the term in literature." The name chickenpox is said to be derived from the word "cicer," a chicken pea, the French word for the same being "chiche." Morton (1694) referred to varicella under the title *variolaæ admodum benignæ*, regarding the disease, as did all of his contemporaries, as a variety of smallpox. Fuller, in 1730, used the following: "The pestilence can never breed the smallpox, nor the smallpox the measles, nor they the trysters or chickenpox, any more than a hen can breed a duck, a wolf a sheep, or a thistle figs. And therefore one sort cannot be preservative against the other." Heberden (1767), in a thesis, urged the dissociation of chicken-pox and smallpox, using the unfortunate term *variola pusillæ* for varicella. Later, Thompson (1820) and Hebra (1866) did much to obscure the early understanding and separation of the two diseases by proclaiming their identity. Their views were, on account of the greatness of the authors, accepted by many; but the profession at large repudiated them, holding then as today that the two diseases were separate and without relation.

Etiology. While the disease is commonly associated with childhood, it is by no means entirely confined to this age. It is more frequently seen in children between the ages of one and eight years, as was shown by Gustable from the

records of the Children's Hospital, London. The more vigorous or adult age is not exempt. At Eustis, Fla., I recently saw a perfectly typical case occurring in a man 45 years of age. Season is said to have but little influence on the disease, prevailing as it does the year round. During the past year more cases have been noticed in the cooler months, from December to May, probably due to the fact that the schools were in session at this season, and the children, while in an infectious state or condition, were allowed to frequent them. Race and sex are said to have no influence upon susceptibility. Varicella is extremely contagious, rivaling smallpox in this respect in some neighborhoods. It can be contracted only by direct exposure to the contagion. Its transmission by a third party seems to me to be highly imaginative. While it has never been precisely determined, it is held as contagious, from the appearance of the first initial symptom up to complete desquamation. Like smallpox, the infection is supposed to take place through the respiratory tract. The nature of the infection remains to be discovered.

"Steiner, the children's physician of Prague, inoculated ten children with varicellus lymph. eight times successfully and twice without result. One inoculation was in a boy of four years old, who had been vaccinated two years before; distinct scars told that a positive result had been obtained. The second case was a two-year-old girl who had never been vaccinated nor had ever had smallpox. After an incubation period of eight days, in both cases the varicella vesicles appeared, spreading over the entire body and accompanied by the corresponding general phenomena. The point of inoculation itself showed no reaction, but dried up in a few days." Had this experiment been confirmed by other authorities, the transmissibility by inoculation with varicellus fluid would be established, but no one else seems to have met with any success whatsoever. Delpech (1843-44), in Paris, at Hospital Necker, attempted to inoculate patients with varicella, but without result. "Hessa compiled data of 113 inoculations with varicellus fluid in 1887: no result; 17 merely local manifestations, and in the remaining nine a general eruption ensued." Thomas, Hein, Vetter, Czakert, Fleishman and J. Lewis Smith got no results. Holt, however, from the following, seems to regard Steiner's experiments as final: "It is well established that the contagion of the disease

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Inoculability
of varicellus
fluid.

is contained in the vesicles, as it may be communicated by inoculation with their contents."

Incubation period.

Variously placed by all the different authorities, though most of them center about 12 to 20 days. From the fact that we never see a case after the eruption has appeared, no reliable observations have been made. As stated by the leading authors, it is as follows:

Gregory: "It does not exceed four days and is less than a week."

Heberden: "Eight or nine days."

Trousseau: "Fifteen to twenty-seven days."

Gee: "At about a fortnight."

Thomas: "Thirteen to seventeen days."

Delpech: "Twelve days."

Holt: "Quite uniformly from fourteen to sixteen days."

Welch & Schamberg: "Fourteen to seventeen days."

Corlett: "Ten to nineteen days."

Th. von Jurgenson: "Thirteen to nineteen days."

Pre-eruptive stage or prodromal symptoms.

In the larger number of cases, the patient will tell you that the first thing noticed was the eruption; occasionally, however, a mother on giving the child a bath, will see the bumps and recall that during the preceding night it was cross and peevish, tossing about a great deal in a restless slumber. Still others notice a few mild precursory symptoms a few hours before observing the eruption. They complain of vague pains, feel chilly and then feverish. Not infrequently, and especially in adults, the patient will complain of dumb chills, lassitude, anorexia, nausea, headache, backache, pains in limbs and general disinclination to any exertion. Temperature: 101 to 103 and 104 degrees. This train of symptoms continuing for three days, preceding the eruption. It may be of interest to note that often these same manifestations, and even in a milder degree, will usher in a case of smallpox of a severe form.

A prodromal trythema was noticed by Henoch a few hours and by Thomas about fifteen hours before the eruption.

The eruption.

As said before, this is often the first thing noted, being accompanied by a rise in temperature from one-half to three or four degrees and lasting for four days and, in the severe cases, longer. The eruption appears first on the face, scalp, and back, then extending downward involves

the entire cutaneous surface, exerting something of a preference for the clothed portion, especially the back. It is present on the extremities in diminished numbers and exceptionally the palms and soles, save in severe cases when it is fairly numerous. Counter irritation, plasters, and any other means of producing superficial congestion affect it in the same manner as smallpox. A case seen in Auburndale recently had shampooed his scalp the night before with an irritating soap, employing considerable friction in his vigorous efforts to relieve a beginning case of alopecia. The next morning he was covered with an exanthem. Examining him later, I found the vesicles thicker on the scalp than on any other portion of the cutaneous area. The eruption begins as a splotch, erythematous patch or macule of a red or rosy color, extending in area from a split pea to a finger nail. The center of this patch soon becomes elevated and turning a pale color, it resembles closely an insect bite. The time consumed in this elevation is said by Welch & Schamberg to be from one to four hours. A day later another series appears, and so on from a half to a week. So that when you examine a patient, you find lesions in all stages of maturation or development, extending from a vesicle to a dried crust, with here and there a tendency to grouping. Studying the individual vesicle, it is found to vary in size from a pin point to a ten-cent piece and is surrounded by an inflamed area from one-tenth to one-half an inch or more in breadth. Pressed upon with the finger, it has tense feeling, but is so frail that it ruptures at the slightest exhibition of force. After the epithelial covering is torn away, a small abrasion remains covered with a slight exudation of serum, beneath which there is no thickening or enduration. In shape they vary all the way from the circular or round, to the markedly oval. Quite a tendency has been noticed on the part of the lesions in the regions of the lower axilla, middle and lower part of back and chest, to arrange themselves with their long axes parallel to the ribs, resembling a watermelon seed in outline. Often among them you will find lesions with a hard crust in the center, the vesicular part puckered about this. The life cycle of the vesicle occupies about three to four days. Its clear straw color becomes grayish white and in some instances yellowish. The tense feeling gives way to a wrinkled or flaccid condition and the vesicle begins to dry in the center and subsequently sinks there. "This is ac-

counted for by the presence of a hair, partial rupture and caving in. True umbilication is said never to take place." The dried crusts separate easily (compared to the tough crusts of smallpox which cling tenaciously to the palms and soles for weeks after the dessication is complete) leaving a slightly reddened area which soon assumes the color of the surrounding skin. In the colored race there is a destruction of pigment which is replaced in some two or three weeks. It often happens that in examining a patient towards the end of the eruption you find several large crusts about the back, feet and legs, due to infection by scratching. In this way impetigo and boils are often engrafted on the varicella.

Complica-
tions.

The only complications I have noticed in my rounds about the State have been impetigo and furunculosis. Authorities, however, mention erysipelas, pyaemiae, disseminated gangrene, nephritis, arthritis, bronchitis, and broncho-pneumonia.

Diagnosis.

The diseases which chickenpox are confused with, are impetigo and smallpox. Though, if one would spend the necessary time and go over the case thoroughly in a search for diagnostic points, a few number of mistakes would be made. Some may wonder how one could err when dealing with so simple a trouble, and since there are no fatalities connected with it, think that it doesn't make much difference about the diagnosis, as the patient is going to come out all right anyhow. So it often happens that an excited layman sees these bumps, or a doctor makes his diagnosis from the door and off they rush for the telegraph office to wire Dr. Porter about a bad case of smallpox. At times the lines of differentiation are too closely drawn to be comfortable when dealing with varioloid, smallpox and chickenpox. Then it is only by an observation of one or two days that any conclusion can be reached at all.

A good plan is to inquire for a history of exposure to contagion, the existence of an epidemic of an eruptive disorder, and if any are at hand who have recently had the trouble, examine them. Look the patient's arm over for old vaccine scars and determine from their appearance and history given, whether the immunity is still effective. Then get a detailed account of the onset and its initial symptoms, their duration and severity. The appearance of the eruption should be noted. Examine for its extent,

peculiarity of distribution, variability in size, difference in maturation indicative of crop formation. Study the individual lesions; and, if possible, trace the cycle of their development. The careful gleaning of data along this line means the systematic determination of the nature of the disorder.

Patients never die of the disease itself. In rare instances complications due mainly to secondary infection intervene and jeopardize the life of the patient. Prognosis.

It is hardly possible that the contagion exists long outside of the body, so that something is to be gained from isolating the child in a sunny room on the second floor, and there keeping him until the skin surface is clear. If the initial symptoms are severe, treat them as indicated. Small doses of phenacetine, caffeine and codeine, frequently repeated, will relieve the discomfort. Give a mild purge and prescribe soft diet. Constantly deluging the patient with hot drinks only aggravates the trouble; also avoid alcohol. Some advise pricking the distended vesicles and cleansing with an antiseptic solution. The itching is the one symptom demanding treatment, which can be allayed by 5 per cent carbolic salve or lotion. A good plan is to give a daily antiseptic bath, dry thoroughly and anoint with salves. Keep this up until all the crusts come away. Guard against infection, as this, with necrosis, is apt to be followed by scarring. Prophylaxis.

In the compilation of this article, I have used my notes, with the following as reference: Holt's Diseases of Children; Nothnagel's Practice; Welch & Schamberg's Contagious diseases.

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Third Assistant to the State Health Officer.

Dr. Joseph Y. Porter,

State Health Officer.

Jacksonville, Fla.

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3—BH.

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Lafayette
county.

nuisances. I have also had one detail of scarlet fever.

January 20, 1906, I was directed to proceed to Mayo, Lafayette County, and take charge of smallpox situation. On my arrival at Mayo I called on Dr. O'Quinn and we drove 5 1-2 miles in the country to Hondley's Still. I found all of the cases among white people. There had been six cases of smallpox, five of whom were convalescing. One of the cases was confluent and had nearly reached the desquamative stage.

Practically every one in the near vicinity had been vaccinated or had had smallpox. The cases were and had been thoroughly isolated. I take this means of expressing my thanks to the doctors of Mayo for their uniform courtesy and assistance, also to Mr. Hamilton, the manager of the Turpentine Still, is due my thanks for his kindly assistance. Dr. O'Quinn consented to disinfect the premises for me at the proper time.

Alachua
county.

On January 26th, I was directed to proceed to Newberry, Alachua County, to relieve Dr. Godard. I arrived at Newberry, January 27th, and had the pleasure of meeting Drs. Godard and Young. At Newberry I found written instructions directing me to relieve Dr. Godard of situation near Newberry, and also to relieve Dr. Young of situation at LaCrosse and Hague, all in Alachua County.

I established my headquarters at Alachua, which is seven miles from LaCrosse, five miles from Hague and 16 or 17 miles from Newberry. Relative to the situation around Newberry I will state that no new case developed, as Dr. Godard had thoroughly vaccinated the community. A detailed report will be given by Dr. Godard. I dismissed situation near Newberry, February 7th. The cases supposed to be at Hague were really one mile away, at Black's Turpentine Still. All considered, there were five cases, exclusively confined to the negroes. I will relate a little incident that happened at this still which impressed on me the urgency of vaccination and re-vaccination among even the youngest of infants when they have been exposed. A negro, his wife and baby were living in a one-room shanty. This one room constituted the kitchen, dining room, bed room and sitting room. The man contracted smallpox, remained in this room with the three-weeks-old baby in the same room, and at times on the same bed. I vaccinated the man's wife, encountered some opposition when I commenced to vaccinate the infant; but, by persevering, I finally succeeded. Both moth-

er and infant developed fine "takes" and the infant's arm fared better than its mother's.

At LaCrosse I found two cases among white people living in same house. In another family there were three cases. Altogether there were five cases at LaCrosse.

In Alachua a white woman and her two children contracted varioloid. The origin of these cases was traced back to LaCrosse. This woman and her children lived in the rear end of an old unoccupied store room, in the business portion of Alachua. By vaccinating those who had not been vaccinated and isolation of patients, no further spread developed.

On February 13th, I was directed to proceed to Fort Meade, Polk County, if I could leave situation at Alachua, and take charge at Fort Meade for a few days. I reached Fort Meade, February 15th, and found one case of smallpox, confluent type. Isolation was rigidly enforced and I commenced vaccinating. No new cases developed at Fort Meade. After hearing of several suspicious cases of smallpox at a turpentine still near town, I drove out to Faircloth Wiggin's Still and found three cases of varioloid. I vaccinated here all who were willing to be vaccinated. On February 22, I was relieved by Dr. Young and returned to Alachua County. On February 27th, after disinfecting and fumigating premises, I dismissed situation at Alachua station.

Polk
county.

On March 2nd, while in Alachua, I was directed to go to Lake City, Columbia County, and investigate suspicious case of smallpox. Dr. G. W. Abney and I drove out to Morgan & Cone's Still just on the outskirts of Lake City, and found one case of smallpox in desiccating stage. I vaccinated those in near vicinity and had no further spread. On March 13th I finally dismissed situation at LaCrosse. I dismissed situation at Lake City on March 15th. In the meantime I had received a letter from the State Health Officer and enclosed was some correspondence from other parties which related to sewage disposal at Lake City. The State Health Officer directed me to make a thorough examination and investigation of same. Lake City, because of its growth and increase of population, deemed it best to install a complete, efficient and up-to-date sewerage system. Bids were

Columbia
county.

Sewage
disposal,
Lake City
Columbia
county.

INTENTIONAL SECOND EXPOSURE

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Lafayette
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Columbia
county.

Sewage
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Lake City
Columbia
county.

opened, contract signed and work had commenced, yet the final method of disposal had not been definitely decided upon. Several plans were thought and talked of, one of which was the disposal by means of a subterranean passage. It might be well to mention at this time that Dr. E. H. Sellards, of the University of Florida, in the last several months, made some interesting and important investigations relative to the subterranean passages in and around Orlando, and the possible results of using those passages for sewage disposal.

Referring again to the question of sewage disposal at Lake City: It was found that the subterranean passage would offer certain obstacles and lend an air of uncertainty to the matter of sewage disposal, so this plan was abandoned. The gentleman who corresponded with you on the subject objected very strenuously to this plan of disposal. On March 8th, I appeared before the Bond Trustees of Lake City and inquired of them what would be their plan of disposal, and I was informed that they had no plan which had been definitely decided on. I stated then that there had been some objections filed against two of their proposed methods.

The Bond Trustees were in a dilemma. They were of course opposed to anything which would in any way endanger the health of the town, yet the sewage must be disposed of.

It was finally decided that a committee from the Bond Trustees, Mr. Lyons, the City Engineer, and myself, should select a day to visit Jacksonville and consult with Dr. Porter. This was done. Mr. Lyons mentioned several methods in vogue in other towns and cities, so in the consultation it was decided if the septic tank in a certain West Florida city proved to be all right, we would try that method of disposal here in Lake City. The bacteriological examination or test of the tank in West Florida proved favorable.

This plan of sewage disposal is being used in Lake City and has proved successful, the purified water being emptied into Hamberg Lake.

March 15th I was directed to proceed to Grand Island, Lake County, and take charge of smallpox situation. I found six cases of smallpox, and one convalescent who had returned to work. These cases were negroes. The

Lake
county

Lake Yale Lumber Company, located at Grand Island, recently moved from South Carolina, brought some of their labor with them. The origin of these cases is easy to trace: One negro reached Grand Island February 5th, from South Carolina, and on February 8th was stricken with smallpox. This was the first case. I vaccinated practically all the negroes, but several of the whites objected, among whom was the blacksmith of the mill. On March 29th I dismissed the negroes after having thoroughly fumigated and disinfected the pesthouse. The blacksmith referred to showed pre-eruptive symptoms and then he readily permitted vaccination.

I was directed to proceed to Alachua, Alachua County, to investigate suspicious cases. These were chicken pox. Alachua
county.

April 2nd, while in Lake City, I received a letter from Dr. G. B. Smithson, of Welborn, reporting five or six cases of smallpox near Welborn. I forwarded the letter to the office in Jacksonville.

April 2nd, I was directed to return to Grand Island, as white case had developed. On my arrival I found the blacksmith had a fully developed case of smallpox. I vaccinated practically every white person in vicinity and had no further spread. The situation was dismissed April 18th and on same date I proceeded to Lake City, as directed, to take charge of smallpox situation there. After consulting Drs. Ives and Nance, I visited Lake
county.

the case of smallpox, and found it to be a negro who was traveling through the country. He claimed he contracted the disease in Pensacola. We had only one other case. Columbia
county.

April 20th I was directed to proceed to White Springs, Hamilton County, and confer with Dr. Alfred. We found one case of smallpox just about ready to dismiss. I disinfected some clothes sent to a boarding house, which had been washed in same house where smallpox patient resided. April 30th I disinfected premises and dismissed patient. Hamilton
county.

May 3rd, I drove to Lake Ogden and found one case of smallpox and several who had had the disease. I cau- Columbia
county.

tioned them about remaining isolated and did not vaccinate any one, as all had previously had the disease, except an infant, and I could not get the parents consent to vaccinate her.

Jackson
county.

May 8th, I was directed to proceed to Marianna, Jackson County, and consult Dr. West. I found one case of smallpox six miles south of Marianna. May 10th I returned to Lake City.

Manatee
county.

May 16th I was directed by letter to go to Palmetto, Manatee County, and investigate an eruptive disease. Dr. Harrison, of Palmetto, and I drove all over Terra Ceia Island, but could find no case. May 17th I left for Lake City.

Walton
county.

May 30th I was directed to go to Walton County and take charge of smallpox cases. I reached DeFuniak next day and found six cases of smallpox in a turpentine camp, nine miles north of the town. I vaccinated twenty persons.

Columbia
county.

June 7th I was directed to go to Lake City, Columbia County, and confer with the sheriff. Altogether there were thirteen cases of smallpox, most of them being about seven miles west of Lake City.

June 21st, while in Jacksonville, I was directed to proceed to Watertown, Columbia County, and investigate suspicious case. I found a German suffering with a minor skin affection. June 17th, after disinfecting and fumigating, I dismissed last case of smallpox in country west of Lake City.

Columbia
county.

On July 17th I found a case of smallpox in Lake City. There had been two other cases in a house, which cases were contracted near Lake Ogden. On July 31st I dismissed the case at Lake City, after fumigating and disinfecting premises.

De Soto
county.

September 14th, as directed, I left for Punta Gorda, DeSoto County, arriving there next day. I called on Mr. George W. McLane, and we had quite a lengthy conversation on the hyacinth question, and I also investigated the local epidemic of chicken pox. Returning, I arrived in Lake City on September 16th.

September 21st, as directed, I left for Miccosukee, Leon County, to investigate a suspicious case of smallpox. The case proved to be a minor skin affection. I returned to Lake City on September 25th.

Leon
county.

October 31st, I left as directed, for Kingston, Volusia County, which town is a suburb of Daytona. I was directed to investigate the general sanitary condition of the little town. Kingston has no municipal government, hence no one to inspect and regulate the minor sanitary affairs of the community. There was a complaint against the F. E. C. Ry. Company, that the carcasses of animals killed on the railroad were buried just out of Daytona and as they were not very deeply buried, the odor was objectionable to the inhabitants of Kingston. A "drain" running through the town held stagnant water, which was a natural breeding place for mosquitoes; hence, malaria was prevalent in the near vicinity of the drain. A sanitary patrolman was asked for. After making a report to the office, I left for Lake City, on November 2nd.

Volusia
county.

December 14th, I was directed by letter to proceed to Live Oak, Suwannee County, and investigate the alleged unsanitary condition of a partially burned building on the main business street of the town. After meeting the Sanitary Officer of Live Oak, I inspected the building. It was very unsightly, but could not be called unsanitary. Before I left Live Oak, however, I made arrangements with the owner of the property to have the building torn down and the city would bear the expense. I returned to Lake City on December 15th.

Suwannee
county.

December 20th, I left for Alachua, Alachua County, as directed, to consult Dr. Bishop, relative to a case of scarlet fever near that town. I found the case and one other convalescent. Five years before a relative of these children had had scarlet fever and the same bedding used by the scarlet fever patient five years ago has been at different times used by these children, and this is the only way the origin of this fever can be traced. No complications were encountered.

Alachua
county.

On December 22nd, I received a message directing me to High Springs, Alachua County, and inspect condition

Alachua
county.

INTENTIONAL SECOND EXPOSURE

38

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Alachua
county.

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Alachua
county.

of jail. The jail was the ordinary wooden building used for such purposes in small towns. The building has two compartments, each being about 9 feet by 15 feet in size. Two small windows with the uncounted cracks furnish the occupant with Nature's freest gift—fresh air. In the winter a prisoner would likely suffer from cold, as there is no way by which the jail can be heated. However, I would imagine that no trouble from the lack of heat in the little jail during the middle of August need be anticipated. Calls of nature are attended to when the marshal makes a visit to the jail and allows the prisoners the freedom of the yard which surrounds the building. I was informed that a consumptive had been confined for several days in the jail with the other prisoners. I instructed the marshal how to disinfect the building and urged that it be done as soon as possible. As directed, I then returned to Lake City.

The following is a tabulated statement of the cases of smallpox treated by counties:

Alachua	17
Columbia	20
Lafayette	6
Lake	7
Polk	4
Walton	6
—	
Total	60

During the year I have vaccinated approximately four hundred persons. I have been detailed four times to inspect alleged sanitary nuisances, and once to investigate suspicious cases of scarlet fever. The remaining portion of my time has been taken up with smallpox work.

J. H. HODGES, M. D., Agent.

Alachua
county.

The past year has been uneventful. No unusual disturbance in the health conditions of the county has occurred. The county has not had to contend with any of the epidemic diseases. Typhoid and malarial fevers have not prevailed to any considerable extent. Late in December three cases of scarlet fever appeared in Gainesville, all in one family. The source of the infection could not be traced. Owing to prompt precautions the disease did not spread beyond this household.

J. FRANK CURTIS, M. D., Agent.

The general health of the Baker County citizens for the year 1906 has been good.

Baker
county.

There has been no smallpox so far as I have learned. Typhoid fever was scarce, there being only two cases that I have known or heard of.

There were two deaths from tuberculosis the past year, and very few persons have any symptoms of the disease.

Considerable chicken pox has existed among the children and also among some of the adult population.

The majority of our citizens, being used to the old-fashioned houses, have good ventilation, and living mostly out of door lives, are not subject to many diseases.

ALBERT H. FREEMAN, M. D., Agent.

Health conditions in Bradford during the year have been about as last year. We have some typhoid fever every year and 1906 was no exception. Fortunately, there were not many deaths. No diphtheria, scarlet fever or dengue were reported during the year. A few cases of measles, mild in character, were seen, but did not spread in eastern section of the county.

Bradford
county.

Investigation shows that hook-worm anaemia is quite prevalent over the county and is seen in all stages. A number of physicians are recognizing and treating this malady, which is dwarfing the mind and body of many a boy and girl. I suggest that this subject be called to the attention of the physicians of the State, as I am sure that it prevails generally throughout Florida.

L. A. PEEK, M. D., Agent.

Relative to health conditions in Brevard County for 1906: There have been more than the ordinary number of cases of typhoid and malarial fevers. Even with the increased incidence of these fevers, the number of cases have been small in the aggregate. We have had very few mosquitoes this year. Something has interfered with the

Brevard
county.

INTENTIONAL SECOND EXPOSURE

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Baker
county.

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Brevard
county.

breeding habits of the seacoast culex which usually make up our summer swarms of mosquitoes. What few mosquitoes they were have been anopheles, largely, and during the year there has been a large influx of turpentine labor into the county bringing the initial cases of malaria. The small number of mosquitoes has caused people to be careless of properly screening their houses, so that they have thereby become infected. There have been no general or prevailing diseases in the county during the year.

—
J. F. MILLER, M. D., Agent.

Citrus
county.

No Report.

—
THOS. EDWARDS, M. D., Agent.

Clay
county.

No Report.

—
W. M. IVES, M. D., Agent.

Columbia
county.

No Report.

—
JAS. M. JACKSON, JR., M. D., Agent.

Dade
county.

No Report.

—
R. L. CLINE, M. D., Agent.

De Soto
county.

The health of the county was exceedingly good during the year 1906, better than any preceding year that I have any knowledge of, which time embraces four years. We had not a case of contagious or infectious diseases.

Comparatively few cases of typhoid or malarial fevers and they were mild. I do not think there has been any

increase in tuberculosis; the few cases we have found among the negroes.

I believe we have done the citizens of this county more good by ridding them of hook-worms than all other services rendered. I am sorry that this class of patients are ignored by a great majority of the physicians of the State. I wish the Health Officer could stimulate the doctors to get interested in them.

—
HIRAM BYRD, M. D., Agent.

It is pleasing to state that this county has enjoyed a freedom from the communicable diseases that is rare. The Isolation Hospital was closed in August and has been open only eight days since. Duval county.

Diphtheria has prevailed to some extent, more towards the fall than earlier in the year. Have seen a few cases of scarlet fever. A few cases of hydrophobia among animals and a few persons bitten, one of which developed the disease and proved fatal, have also been reported.

During the summer the Board of Public Works of Jacksonville laid a sewer along Main street from the river to Ashley street, a distance of some seven blocks. As this was a very slow process, and kept one of the busiest thoroughfares of the city torn up for several weeks just in the middle of the summer, some apprehension was felt about it and the State Health Officer was appealed to for interference, but in the light of our present knowledge, there should be no sickness chargeable to overturning the earth in summer; and as a matter of fact, there was none resultant from it.

Under the City Board of Health of Jacksonville, an attempt at mosquito extermination has gone steadily on during the year. But the public is not yet educated to that degree of co-operation that is necessary to make this work appreciably felt.

WARREN E. ANDERSON, M. D., Agent.

Escambia
county.

There has been a marked decrease in the number of cases of the acute infectious diseases prevailing in this county during the year 1906.

The past summer was a trying one, owing to the possible recrudescence of yellow fever, following the epidemic of 1905, and quite a number of cases presenting suspicious symptoms, at first, came up for careful and serious investigation. Every precaution was taken in the management of these cases, both in preventing a spread of the disease should it develop, and in preventing panic and apprehension on the part of the public.

It may be of interest to note that the City Board of Health, in promptly executing the ordinances respecting the mosquito question recommended by the Escambia County Medical Society, and passed with slight amendments by the City Council last winter, so effectually rid the community of mosquitoes that an epidemic would have been impossible. This action, insuring a sense of security, and conferring the highest degree of comfort on the population, merits universal approval and support.

Smallpox.

Smallpox prevailed to the extent of fifteen (15) cases: Twelve colored and three white—all males. Of this number fourteen (14) were treated in the State Isolation Hospital, at an expense of ninety-five and 61-100 dollars (\$95.61), in medical supplies and provisions. The total number of days of maintenance was two hundred and thirty-seven (237), or a cost per diem of about forty cents. No deaths occurred from this disease.

Scarlet
fever.

Scarlet fever appeared in only two cases, one white male and one colored female, both of which recovered.

Early recognition, prompt and thorough isolation and disinfection, prevented a further spread of the disease.

Diph-
theria.

Diphtheria occurred in twelve cases, all white and equally divided as to sex. Of this number, four, or 33 1-3 per cent. died. This mortality, unusually high since the use of anti-toxin has become so general, is accounted for by the fact that the disease was unsuspected until so late in the attack that this remedy had no effect whatever, and in one case was not given at all, as the child was moribund when seen by the physician who reported it.

Malaria.

Malarial fever, until the great storm of September 27th, was almost a clinical curiosity, but since that date, has

prevailed largely throughout the entire county, owing, of course, to the swarms of mosquitoes which easily found numerous new breeding places for multiplying their species and in turn spreading the disease.

From the report of the City Health Officer, it is learned that there were one hundred and nineteen (119) cases of typhoid fever reported in the City of Pensacola during the year. Of this number twenty died—white males, 10; white females, 5; colored males, 3; colored females, 2. This mortality table, kept by the City Clerk, who has a multitude of other onerous duties to perform, is believed to be inaccurate, from the fact that the burial permit is issued to the undertaker upon his own certificate, *which does not show the cause of death*, it being the intention to obtain the attending physician's certificate later. This, of course, is frequently forgotten by both the clerk and the physician, and thus the true value of the record is destroyed.

Typhoid
fever.

Of tuberculosis there were eighty-one (81) cases reported to the City Health Officer during the year 1906, with a mortality of twenty-four: White males, 6; white females, 2; colored males, 7; colored females, 9. These figures are also probably incorrect for the reasons stated above.

Tubercu-
losis.

It is my belief that the City Council will, at an early day, take such steps as are necessary to collect and record the *births* and *deaths* in an approved and correct manner, as it is a matter of too much importance to be ignored to the extent that in a thriving and growing city the *records should show* a greater number of deaths than births.

One hundred and five (105) rooms were fumigated during the year, through this office, and sixty-five (65) transportation permits issued.

G. W. LAMAR, M. D., Agent.

In accordance with your request that I furnish you a short resume of affairs in Gadsden for the past year, would say that year by year conditions become better, whether the children have all had diseases peculiar to

Gadsden
county.

childhood or whether a good, healthy condition has prevailed.

While we have not been entirely free from measles, whooping cough and chicken pox, we have been almost entirely free from diphtheria and scarlet fever; and smallpox from continued work on vaccination has almost become unknown.

From a general standpoint, the sanitary conditions have been remarkably good, as the people are becoming more and more educated along these lines.

R. D. TOMPKINS, M. D., Agent.

Hamilton
county,

No Report.

D. F. MORRISON, M. D., Agent.

Hernando
county,

Your recent communication in regard to report from this county for the past year, has been received, and I beg to say in reply, that this has been an unusually healthy year. No measles, no epidemic of any character, no typhoid that I know of. Have been away six weeks during the summer, but have often instructed the two physicians here to report births and deaths, but am sure they have not done so.

We can not complain at our sanitary surroundings. The county health is good.

CHAS. W. BARTLETT, M. D., Agent.

Hillsboro
county,

I have the honor to submit to you the annual report for Hillsboro County for the year 1906.

The first three months of 1906 were the only ones in which we had any smallpox, and the number of cases was not so great as in the previous year. The 1st of January found us with twenty-eight cases in the hospital, and, as can be seen from the attached table, the number diminished steadily until June 13th, when we had the

last case, and since that time we have had no more cases reported in Tampa, or in fact, in any part of the county. With the disappearance of smallpox the demand for vaccination also greatly decreased; and, although the Board of Public Instruction requires the vaccination of the children attending the public schools, the number of those applying for vaccination is very small, which, in connection with the absence of the disease, goes to prove the thorough vaccination of the previous year.

In other matters of public health there is no doubt that 1906 has been our banner year. We had a few cases of the following contagious and infectious diseases: Typhoid fever, diphtheria, measles, scarlet fever, and one case of cerebro-spinal-meningitis. At no time has there been anything like an epidemic of any one of them. Typhoid, for example, was prevalent through almost every month of the year, but only a few cases at any time. Of diphtheria, we had at one time five cases, the greatest number of the whole year; of scarlet fever we had only four cases reported, and these were scattered through different parts of the city and occurred at different times, so there seemed to be no relation between them. Measles was not reported to this office by physicians practicing in this town, but I have seen several cases in my own private practice.

There is one point in connection with diphtheria that is worthy, I believe, of calling to your attention, and that is, that although the State Board of Health furnishes free anti-toxin to the poor, yet there seems to be a misunderstanding of the matter or a lack of information among the physicians, and several cases have come to the knowledge of the Agent of the Board where the lack of anti-toxin in the treatment of indigent persons has been the probable cause of death and where by its use life might probably have been saved. The doctors do not seem to understand it, and think it is only the agent of the State Board of Health who is able to furnish it.

The past summer did not pass without the usual report of yellow fever, but, fortunately, in every case it was found it was only a false alarm. The principal one of these reports was the case at Gary Postoffice on Seventh avenue, outside of the city, of which you had a special report, submitted at the time of the occurrence. In connection with this case, I want to add, that it was very

INTENTIONAL SECOND EXPOSURE

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gratifying to the agent of the Board to notice the perfect confidence and trust of the people in the State Board of Health. Although the rumor was freely circulated and some families were ready for a stampede, the report of the Board at once brought complete tranquility into the neighborhood.

The removal of quarantine by the Marine Hospital Service, against Cuba, was followed by the roll call quarantine by the State Board of Health; in this work I was ably assisted by Drs. Young and A. L. Bartlett. The number of steamers and of passengers, immune and non-immune, inspected and quarantined can be seen in the inclosed tabulated report. The amount of work done in this connection was considerable, and to be appreciated it must be borne in mind that the distance between Tampa and Port Tampa is considerable, that the arrival of steamers from Havana was irregular, between 12 P. M. and 1 A. M. at times, compelling some of us to be there a great number of hours, while at the same time we had to attend to the roll call at Tampa and meet the steamers from Havana direct to Tampa proper; and also that the greatest number of the quarantined people were of the laboring class—cigarmakers and other workers in tobacco in this locality—and their financial losses from time consumed on account of the quarantine had to be reduced to the minimum. The work of searching for those who were sick at home, or for any reason failed to report, was also considerable, due partly to the fact that a good many of them resided in West Tampa; and the Fortune street bridge in this city having been destroyed, the only means of communication with West Tampa was by way of the Lafayette street bridge, and sometimes hours were consumed in locating one single individual. During this quarantine everything possible was done to lessen the inconvenience to the traveling public and save time.

In connection with the inspection of cigar factories to see that the rules were carried out regarding cuspidors, I was helped by Dr. Young, and I suppose that he will make a very detailed report of this matter.

Hoping that the year 1907 will be even better than 1906, I respectfully submit my annual report.

Record of number of patients admitted to and discharged from the Hillsboro County Isolation (Smallpox) Hospital, during 1906.

	In Hos- pital.	Ad- mitted.	Dis- charged.	Total.
Jan. 1	28	0	0	28
Jan. 2	28	0	0	28
Jan. 3	28	0	3	25
Jan. 4	25	0	0	25
Jan. 5	25	0	0	25
Jan. 6	25	0	2	23
Jan. 7	23	0	0	23
Jan. 8	23	2	0	25
Jan. 9	25	0	0	25
Jan. 10	25	0	0	25
Jan. 11	25	1	0	26
Jan. 12	26	1	4	23
Jan. 13	23	0	0	23
Jan. 14	23	0	0	23
Jan. 15	23	2	0	25
Jan. 16	25	0	0	25
Jan. 17	25	0	0	25
Jan. 18	25	0	2	23
Jan. 19	23	0	0	23
Jan. 20	23	0	4	19
Jan. 21	19	0	0	19
Jan. 22	19	0	2	17
Jan. 23	17	1	0	18
Jan. 24	18	0	0	18
Jan. 25	18	0	0	18
Jan. 26	18	0	0	18
Jan. 27	18	0	1	17
Jan. 28	17	0	0	17
Jan. 29	17	0	0	17
Jan. 30	17	0	0	17
Jan. 31	17	0	0	17

Admitted to hospital 7
 Discharged 17
 Deaths none

INTENTIONAL SECOND EXPOSURE

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Jan. 1	28	0	0	28
Jan. 2	28	0	0	28
Jan. 3	28	0	3	25
Jan. 4	25	0	0	25
Jan. 5	25	0	0	25
Jan. 6	25	0	2	23
Jan. 7	23	0	0	23
Jan. 8	23	2	0	25
Jan. 9	25	0	0	25
Jan. 10	25	0	0	25
Jan. 11	25	1	0	26
Jan. 12	26	1	4	23
Jan. 13	23	0	0	23
Jan. 14	23	0	0	23
Jan. 15	23	2	0	25
Jan. 16	25	0	0	25
Jan. 17	25	0	0	25
Jan. 18	25	0	2	23
Jan. 19	23	0	0	23
Jan. 20	23	0	4	19
Jan. 21	19	0	0	19
Jan. 22	19	0	2	17
Jan. 23	17	1	0	18
Jan. 24	18	0	0	18
Jan. 25	18	0	0	18
Jan. 26	18	0	0	18
Jan. 27	18	0	1	17
Jan. 28	17	0	0	17
Jan. 29	17	0	0	17
Jan. 30	17	0	0	17
Jan. 31	17	0	0	17

Admitted to hospital 7
 Discharged 17
 Deaths none

Record, Isolation Hospital, February, 1906.

		In Hos- pital.	Ad- mitted.	Dis- charged.	Total.
Hillsboro county.	Feb. 1	17	0	0	17
	Feb. 2	17	0	0	17
	Feb. 3	17	0	0	17
	Feb. 4	17	0	0	17
	Feb. 5	17	1	0	18
	Feb. 6	18	0	0	18
	Feb. 7	18	1	0	19
	Feb. 8	19	1	0	20
	Feb. 9	20	0	0	20
	Feb. 10	20	0	0	20
	Feb. 11	20	0	0	20
	Feb. 12	20	0	4	16
	Feb. 13	16	0	0	16
	Feb. 14	16	0	3	13
	Feb. 15	13	0	0	13
	Feb. 16	13	0	2	11
	Feb. 17	11	0	0	11
	Feb. 18	11	0	0	11
	Feb. 19	11	0	5	6
	Feb. 20	6	0	0	6
	Feb. 21	6	0	0	6
	Feb. 22	6	0	0	6
	Feb. 19	11	0	5	6
	Feb. 24	5	0	0	5
	Feb. 25	5	0	0	5
	Feb. 26	5	0	0	5
	Feb. 27	5	0	5	0
	Feb. 28	0	0	0	0

Admitted to Hospital .. 3
 Discharged 20
 Deaths none

No cases entered during March, 1906.

Record Isolation Hospital April, 1906:

		In Hos- pital.	Ad- mitted.	Dis- charged.	Total.
	Apr. 1	0	0	0	1 Hillsboro county.
	Apr. 2	0	1	0	1
	Apr. 3	1	0	0	1
	Apr. 4	1	0	0	1
	Apr. 5	1	0	0	1
	Apr. 6	1	0	0	1
	Apr. 7	1	0	0	1
	Apr. 8	1	0	0	1
	Apr. 9	1	0	0	1
	Apr. 10	1	0	0	1
	Apr. 11	1	0	0	1
	Apr. 12	1	0	0	1
	Apr. 13	1	0	0	1
	Apr. 14	1	0	0	1
	Apr. 15	1	0	0	1
	Apr. 16	1	1	1	1
	Apr. 17	1	1	0	2
	Apr. 18	2	0	0	2
	Apr. 19	2	0	0	2
	Apr. 20	2	0	0	2
	Apr. 21	2	0	0	2
	Apr. 22	2	0	0	2
	Apr. 23	2	0	0	2
	Apr. 24	2	0	0	2
	Apr. 25	2	0	0	2
	Apr. 26	2	0	0	2
	Apr. 27	2	0	0	2
	Apr. 28	2	0	0	2
	Apr. 29	2	0	0	2
	Apr. 30	2	0	0	2

Admitted 3
 Discharged 1
 Deaths none

Record Isolation Hospital, May, 1906:

		In Hos- pital.	Ad- mitted.	Dis- charged.	Total.
Hillsboro county,	May 1	2	0	1	1
	May 2	1	0	0	1
	May 3	1	0	0	1
	May 4	1	0	0	1
	May 5	1	0	1	0
	May 6	0	0	0	0
	May 7	Hospital closed until May 11th.			
	May 8 .....	.	.	.	.
	May 9 .....	.	.	.	.
	May 10 .....	.	.	.	.
	May 11	0	2	0	2
	May 12	2	0	0	2
	May 13	2	0	0	2
	May 14	2	0	0	2
	May 15	2	0	0	2
	May 16	2	0	1	1
	May 17	1	0	0	1
	May 18	1	0	0	1
	May 19	1	0	0	1
	May 20	1	0	0	1
	May 21	1	0	0	1
	May 22	1	0	0	1
	May 23	1	0	0	1
	May 24	1	0	0	1
	May 25	1	0	0	1
	May 26	1	0	0	1
	May 27	1	0	0	1
	May 28	1	0	0	1
	May 29	1	1	0	2
	May 30	2	0	0	2
	May 31	2	0	0	2

Admitted to Hospital ... 3

Discharged 3

Deaths none

June, 1906.

	In Hos- pital.	Ad- mitted.	Dis- charged.	Total.
June 1	2	0	0	2

These two patients were discharged on June 13th, which was the end of smallpox in this county during 1906.

RECORD OF ROLL-CALL QUARANTINE AT TAMPA AND PORT TAMPA, 1906.

Name of Vessel.	Steamship Line.	Date of Arrival.	Total No. of Passengers.	No. Passengers Not Subject to Quarantine Bound Outside State.	No. Passengers Stopping in State, Outside of Tampa.	No. Passengers Stopping in Tampa, Subject to Roll Call for 5 Days.	Total No. Immunes.	Cuban Immunes.	Spanish Immunes.
Mascotte	P. & O.	1906. Nov. 4	57	3	3	51	21	21	0
Olivette	P. & O.	Nov. 8	75	4	0	71	30	30	0
Rita	Andre	Nov. 10	129	0	8	121	35	34	1
Clinton	McKay	Nov. 11	40	0	0	40	10	10	1
Olivette	P. & O.	Nov. 11	99	17	1	81	18	17	1
Mascotte	P. & O.	Nov. 14	44	8	1	35	11	9	2
Olivette	P. & O.	Nov. 16	16	7	1	8	3	3	0
Rita	Andre	Nov. 16	110	0	7	103	35	33	2
Mascotte	P. & O.	Nov. 18	69	0	0	61	26	26	0
Olivette	P. & O.	Nov. 21	38	16	0	18	6	5	1
Rita	Andre	Nov. 21	87	0	4	86	35	35	0
Mascotte	P. & O.	Nov. 23	33	12	1	19	5	4	1

RECORD OF ROLL-CALL QUARANTINE AT TAMPA AND PORT TAMPA, 1906.—(Con.)

Name of Vessel.	Steamship Line.	Date of Arrival.	Total No. of Passengers.	No. Passengers Not Subject to Quarantine Bound Outside State.	No. Passengers Stopping in State, Outside of Tampa.	No. Passengers Stopping in Tampa, Subject to Roll Call for 5 Days.	Total No. Immunes.	Cuban Immunes.	Spanish Immunes.
Olivette	P. & O.	Nov. 25	60	8	2	50	32	32	0
Olivette	P. & O.	Nov. 28	18	6	0	12	2	1	1
Rita	Andre	Nov. 29	64	1	4	59	30	30	0
Mascotte	P. & O.	Nov. 30	19	11	1	7	2	1	1
Olivette	P. & O.	Dec. 2	62	12	0	50	5	3	2
Olivette	P. & O.	Dec. 5	65	8	6	51	16	15	1
Mascotte	P. & O.	Dec. 7	51	7	2	42	10	8	2
Mascotte	P. & O.	Dec. 9	124	3	2	119	33	30	2
Rita	Andre	Dec. 10	74	2	0	72	24	24	0
Olivette	P. & O.	Dec. 12	57	17	4	36	10	9	1
Mascotte	P. & O.	Dec. 14	26	11	6	9	2	1	0
Olivette	P. & O.	Dec. 16	75	15	1	59	23	23	0
Rita	Andre	Dec. 19	37	0	0	37	12	11	1
									54

Olivette	P. & O.	Dec. 19	40	12	3	25	7	7	0
Mascotte	P. & O.	Dec. 21	42	14	3	25	12	12	0
Olivette	P. & O.	Dec. 23	62	13	4	45	14	13	1
Rita	Andre	Dec. 24	35	0	4	31	11	9	2
Olivette	P. & O.	Dec. 26	19	8	0	11	7	5	2
Mascotte	P. & O.	Dec. 28	49	5	4	40	19	18	1
Olivette	P. & O.	Dec. 30	132	13	6	113	60	55	5
									31
									Spanish
									5
									American
									36
									Immunes
									534
									565
									1,587
									80
									241
									1,908

THEOP. WEST, M. D., Agent.

Jackson
county.

In making my annual report to you of the health of Jackson County for 1906, permit me to say that the health of the entire county has been remarkably good. The prevailing diseases of this county have generally been of a malarial character, especially in the regions adjacent to river swamps and the rich table lands in the northwestern part of the county.

There have been a few scattering cases of typhoid fever in different parts of the county, but they were of a mild character. There have occurred only a very few cases of smallpox, which were of a very mild type, within the boundary of the county during the entire year. With this exception the county has been exempt from infectious and contagious diseases.

J. R. McEACHERN, M. D., Agent.

Jefferson
county.

The general health of Jefferson County has been exceptionally good for the year 1906.

We had a few cases of smallpox in the southern part of the county during the early summer, but prompt measures were instituted by the State Board and the disease was soon under control and was entirely stamped out in a few weeks. The disease was confined entirely to a few families of negroes. I do not know the source of the infection.

Malarial fevers have not been very prevalent this year.

W. T. SHELTON, M. D., Agent.

Lake
county.

At the close of this year (1906), I am glad I can report that health has been good in this, the northern end of Lake County. Have had no epidemics and very few cases of typhoid fever.

Had two cases of apoplexy, death in each case soon following. Remittent and intermittent fevers, dysentery, diarrhoea, cholera infantum, inflammation bowels

and stomach, colds, and la grippe, have been the principal acute diseases of this year.

C. M. AUSLEY, M. D., Agent.

Leon
county.

No report.

R. T. WALKER, M. D., Agent.

I have to report that there was nothing unusual in the health conditions of our county last year (1906).

In the town of Cedar Key we had an epidemic of whooping cough, and also one of chicken-pox among the children, but the general health of the town was good, as usual.

Out in the county there was the usual amount of malarial fever, and some typhoid fever, though there was nothing remarkable in any of the sickness.

L. C. RUTER, M. D., Agent.

Madison
county.

No report.

H. GATES, M. D., Agent.

I cannot make a report that will be satisfactory to either you or myself, as there has been no record kept as to either births or deaths. The other doctors of the county have made no report to me. I do not know what diseases have been treated by other physicians, nor with what results, I know of fourteen cases of diphtheria treated, with two deaths. One case of scarlet fever only. Taken altogether, I would consider it a healthy year for Manatee County.

Manatee
county.

INTENTIONAL SECOND EXPOSURE

56

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57

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Manatee
county.

W. V. NEWSOM, M. D., Agent.

Marion
county.

No report.

J. N. FOGARTY, M. D., Agent.

Monroe
county.

I herewith submit my report for Monroe County for the year 1906.

During the month of January our peace was not disturbed by inroads of any contagious or infectious diseases. To us this month was exceptionally healthy.

In February we were visited by lagrippe. The disease attacked young and old, sparing but few, though not fatal at all in its results.

In March, whooping cough claimed us as victims. Infants, those in middle life, and the senile, all alike, became afflicted. There were some few deaths reported among infants, though none among adults. Though the onset was dreaded by all the paroxysms of overgrown men on our public thoroughfares were ridiculous in themselves and not to say the least, amusing. The spread of the disease continued uninterrupted for a number of months, covering time from March to October. In fact, the spread did not seem to cease until all available material had been made use of.

Unlike the year previous, diphtheria was not a stranger to us, although we had but one case reported during the entire year. This case was isolated, quarantined during the course of the disease, and at its termination proper precautions were taken and all premises fumigated. One suspected case occurred at the Ruth Hargrove Seminary. A strict quarantine was observed by isolating the patient and discontinuing attendance at school until the attending physician decided positively that the case was not one of diphtheria. Then, and not until then, did the children return to school and resume their studies.

Tuberculosis as it is always wont to do, claimed a few among us as victims. In connection with tuberculosis, I beg to state that strict observation is kept by your sanitary policeman, of all the cigar factories in relation to the compliance of the law compelling them to furnish cuspidors for every workman. The condition of the floors since the enforcement of this law last year, I am

proud to say, is far superior to any other time previous to the active, enforcement of the same.

Typhoid fever, to a lesser extent than in 1905, invaded our ranks, but few succumbed.

According to your directions, a roll call quarantine against Cuba was continued for a number of weeks after the reported absence of yellow fever in Havana, without much difficulty, and until I was in receipt of orders to discontinue same.

In making inspections of southbound West Coast steamers, I note that 99 per cent of all negroes coming into our community have been successfully vaccinated. This, I think, is a good recommendation of the law compelling such procedure.

Our city odorless excavating department continues to do as efficient work as possible with the means at their command. The matter of securing a more modern plant I have taken up with the City Fathers, but at this writing nothing definite has been done.

The scavenger work in our city is done by contract at the present time, and is the most efficient service that we have ever had. Our streets and by-ways now are cleaner than they have been for a number of years.

D. G. HUMPHREYS, M. D., Agent.

I herewith beg to submit my report for Nassau County for the year 1906. We have had a comparatively healthy year, there having been only a few cases of contagious diseases. There were three outbreaks of smallpox, with a total of fifteen cases. Vaccination and isolation promptly stamped out the disease. Scarlet fever and diphtheria continue to crop out here and there, and it seems a hard matter to stamp out these diseases in our county. There have been only a few cases of typhoid fever, and not as much malarial fever as we anticipated, or usually have to contend with.

We have had an unusually large number of cases of tuberculosis, chiefly among the colored race, and almost exclusively confined to the mulatto type.

The sanitary condition of the county is good. The same can be said of the City of Fernandina, this improvement

being largely due to the new sewer system and the enforcement of city ordinances regarding stagnant water and the growth of rank weeds on vacant lots.

W. KILMER, M. D., Agent.

Orange
county.

I have the pleasure to inform you that Orange County has been peculiarly exempt from contagious and zymotic diseases, save two cases of smallpox from convict camp, and three cases of diphtheria. Malaria is relegated to the past. This is entirely due to that Bureau of Education, The Health Notes, which you have so generously distributed. People are awakening to the necessity of prevention.

Orlando is making rapid stride in the direction of sanitation. Our great problem of sewerage disposal has been solved, and other towns in the county are becoming alive to the importance of preventive efforts in preserving the health of their localities.

Osceola
county.

M. J. HICKS, M. D., Agent.

No Report.

E. W. WARREN, M. D., Agent.

Polk
county.

The general health of Polk County has been exceptionally good the past year. No epidemics of any kind. General prosperity. The sanitary conditions favorable.

E. W. WARREN, M. D., Agent.

Putnam
county.

Replying to yours asking for a report of the health conditions in Putnam County for the year of 1906, I beg to say that there is nothing to report except that the health of the county as a whole has been remarkably good. Not a single case of the quarantinable diseases has

occurred during the year, and we have suffered but little from any of the contagious or infectious diseases. A few mild cases of typhoid, comparatively, with an exceedingly low death rate; practically no pneumonia, and less than the usual amount of malaria. We have had a few deaths from tuberculosis, but far more have come here and showed marked improvement.

C. B. McKINNON, M. D., Agent.

In compliance with your request, I take pleasure in submitting to you my report of the health conditions of Santa Rosa County for 1906.

The year was an unusually healthy one; most of the sickness was minor troubles, and yielded readily to treatment. With this, however, were a few cases of typhoid and malarial fevers. We have had less malaria this year, in this southern part of the county, than we have had in several years. The freedom from malaria is attributed to the care taken by the citizens, in destroying the breeding places of the mosquito, fearing the possibility of an outbreak of yellow fever, from the epidemic of the previous year. Of course, we did not have the yellow fever, but it is thought that the precautions taken considerably lessened the usual number of malarial cases that we, as a rule, have in this part of the county during the year.

During the autumn and the early part of the winter, there were many cases of la grippe scattered throughout the county. While it was in some cases quite severe, there were very few fatalities.

There are a number of cases of pulmonary tuberculosis in the county, and several deaths have occurred from the disease, the greatest number among the negroes.

I was asked by Dr. Byrd to investigate relative to uncinariasis during the year and report results. I have done so in a number of cases where I thought it possible that the hookworm or eggs might be found, but all reports of examinations were negative.

J. M. IRWIN, M. D., Agent.

St. Johns
county.

Replying to your request for report on health conditions in St. Johns County during the year 1906, I would say that it seems to have been an unusually healthy year. The only case of scarlet fever that I have known of was that of a little girl coming from Washington, D. C. She became ill on the train on her way to St. Augustine. Her case was mild, and she made perfect recovery.

There were apparently three cases of diphtheria during the year. Two of these came under my observation. Both recovered. One of these was the mother of a little boy who died a few days before the mother became ill, of what the attending physician diagnosed "laryngitis." Hence the third case.

Two cases of smallpox in the county came to my notice. One was a colored man who came in from a lumber camp. The other was a negro employed to care for the first patient. This man was employed because he was supposed to be immune, as there seemed no question that he had had the disease several years before, and I had previously employed him to look after other cases. After caring for the first patient for about 28 days, this man began feeling ill and developed a typical case of smallpox. The process was then reversed, and caretaker No. 1 became patient. His case was a mild one, and he was finally discharged, apparently well and in good condition, excepting a slight albuminuria. I knew nothing more of him until a layman told me recently that he had died several months ago. From what my informant told me, I judge that the fellow died, undoubtedly, of a torn navelitis.

Sanitary conditions in the county seem to be about as usual.

S. C. WOOD, M. D., Agent.

Sumter
county.

No Report.

JOHN McDIARMID, M. D., Agent.

Volusia County has been remarkably free from communicable diseases during 1906. This, of course, refers to such contagious and infectious diseases as excite public concern and alarm.

Volusia
county.

We have had a few cases of typhoid fever, a great many of the different types of malarial fever, and quite a number of cases of a continued fever which partakes of the nature, more or less, of our specific fevers, and which, for want of a better name, I may call "anonymous" fever. It remains for some of our bacteriologists to definitely decide as to the one constant and causative factor of the disease.

While our native and permanent resident population is not very large, our county is visited by thousands of tourists every winter, most of whom come in search of health, so that our physicians for about four months every year are brought in contact with almost every ill to which human flesh is heir.

It is much to be regretted that our physicians and midwives do not promptly report every birth and death occurring in their practice. As agent for this county, I have appealed to every practitioner and "granny" individually, and yet I feel certain that some births, and, perhaps, deaths, occur that are never reported. There is a remedy for this indifference, and I doubt that any other is effective; and that is to "make them do it." We are not so likely to forget a lesson that costs us something.

Our citizens are highly pleased with the management of the State Board of Health, and many of the laity are interested in and frequently quote from Health Notes.

F. C. WILSON, JR., M. D., Agent.

No Report.

Washington
county.

CITY OF PENSACOLA.

DR. J. HARRIS PIERPONT,

City Health Officer.

City of
Pensacola,
Escambia
county,
Vital
Statistics
1906.

The following contagious diseases were reported to me
for the year 1906:

Smallpox (varioid).	9
Chickenpox.	13
Measles.	15
Diphtheria.	5
Tuberculosis.	71
Typhoid fever.	136

Annual report of deaths reported to the City Board of
Health of the City of Pensacola:

Accidents—

Killed.	4
Drowning.	7
Broken neck.	1— 12

Abscess liver.	5
Apoplexy.	7
Alcoholism.	3
Abscess lung.	1
Burns.	9

Bronchitis—

Chronic.	1
Capillary.	1
Otherwise.	2— 4

Cerebral softening.	1
Croup.	2
Convulsions.	6
Cancer.	4
Cholera infantum.	14
Cystitis.	1
Catalepsy.	1
Cerebellar hemorrhage.	2
Corcinoma of breast.	1
Colic.	1
Child birth.	1
Dysentery.	7

Dropsy.	11
Dropped dead.	1
Diarrhea—	
Diarrhea.	2
Diarrhea, chronic.	1— 3
Diphtheria.	4
Exposure.	1
Enteric colitis.	2
Enteric fever.	22
Gunshot wound.	3
General debility.	1
Gastritis.	2
Gastro-enteritis.	2
Gangrene.	1
Heart Disease—	
Dilatation.	1
Endocarditis.	1
Embolism.	1
Otherwise.	19
Aortic regurgitation.	1— 23
Hepatic cyst.	2
Hemorrhage.	4
Hepatitis, acute.	1
Injury to brain.	2
Icterus—	
Icterus.	2
Icterus, malignant.	1— 3
Intestinal obstruction.	7
Insanity.	1
Inanition.	2
Indigestion, acute.	1
Infantile jaundice.	1
Lagrippe.	7
Laryngismus stridulus.	1
Marasmas.	3
Meningitis—	
Acute.	1
Spinal.	1
Otherwise.	2— 4
Murdered.	1
Mental insufficiency.	1
Malarial fever.	1
Not given.	82

Nephritis—		
Acute.	2	
Chronic.	4	
Otherwise.	2—	8
Nervous prostration.	1	
Old age.	5	
Pneumonia—		
Pneumonia.	15	
Pneumonia, typhoid.	1—	16
Premature birth.	5	
Poisoning—		
Arsenic.	1	
Accidental.	1	
Uraemic.	2—	4
Paralysis.	9	
Pharyngitis, acute.	1	
Peritonitis.	3	
Phthisis.	5	
Prostatitis.	1	
Rheumatism.	1	
Still born.	49	
Septicaemia.	4	
Suicide.	3	
Senility.	3	
Stricture.	1	
Strangulated hernia.	1	
Scrofula.	1	
Tuberculosis.	32	
Tetanus.	8	
Teething.	2	
Tremens, delirium.	1	
Tumor on brain.	1	
Unknown.	7	
White thrash.	3	
Total deaths.		457

Unusual
freedom
from mala-
ria and
smallpox.

The agents of the Board and professional friends throughout the State, with whom the Health Department has had conversation or been in correspondence, have almost universally commented upon the peculiar freedom of the State during this past year from malaria and smallpox, and while no statistics in regard to malaria and its prevalence are obtainable that can be considered

as positive evidence of the fact, yet frequent remarks heard from citizens of the State in different sections, and particularly where malarial disorders had heretofore been exceedingly rife, that "chill and fever" has been less prevalent in this or that district than in former summer seasons, warrants the belief and even more than a mere supposition, a firm conviction, that the advice of the Board given in Annual Reports and by pamphlet literature to screen dwellings and to use nets during the summer months especially, has contributed in no little degree to the comfort of the citizen and to a decrease of malarial disorders, thus preventing infection by mosquitoes, particularly of the *Anopheles* variety.

During the last half of the year there were only two cases of smallpox reported in the State, and while there may have been light forms of the disease that were not recognized as such, and were not reported, yet it is hardly likely that there were many, because county authorities and the people themselves have gotten into the habit—a very commendable one, too—of immediately reporting to the Board, and generally by telegram, all eruptive diseases of a doubtful nature, so that the Executive Office is not long without information of this character when any sickness having a skin eruption as an especial distinguishment, appears in a community or sparsely settled country district. Here again it can be assumed, with modest mention, that a general vaccination of the people of the State, which the Board has persistently urged and as much as possible enforced, has had the effect of immunizing the greater portion of the State's population to such an extent that a case of smallpox, when introduced from without the confines of the State, does not tend to spread nor to create that consternation and panic which in the early days of the existence of the Board, marked every appearance of even an isolated introduction.

Smallpox.

Vacci-
nation.

Notwithstanding the fact that some three hundred and more years have passed since the immortal Jenner discovered the protective ability of vaccine virus against smallpox, and evidence of the beneficial results of this discovery to the human race has been accumulating since, until it would seem to be no longer necessary to present facts to prove the correctness of this wonderful revelation to man, and yet there are still to be found in every community those who oppose this beneficent protective

Anti-
vaccina-
tionists.

agency, and the State Board of Health of Florida is not alone in having to fight a hostility which comes from a wilful determination not to accept proven conclusions. Other State Boards of Health have the same difficulty in their efforts to protect individuals from each other and from disturbing causes of disease, and seemingly it matters not what array of proof is offered to convince the skeptical, a following is always to be found in the opposite direction, among the ignorant and prejudiced, notwithstanding the fact that whenever and wherever vaccination has been universally practiced, smallpox has been first greatly reduced in frequency of occurrence and then ultimately obliterated.

Compul-
sory
Vaccina-
tion.

Compulsory vaccination laws have been held on more than one occasion, by the highest courts in this country, not to be incompatible with the privileges and rights of the citizen, as guaranteed by the Constitution, whenever the question has been raised against enforcing this measure, during periods of prevalence of the disease or to prevent its spread. It is difficult, therefore, to understand how, in the presence of overwhelming evidence to the contrary, that intelligence and sound reason, which is supposed to be the test of wise statesmanship and ability to legislate for the good of the whole people, a resistance should meet the advice of the health authorities whenever the request is made for the enactment of a compulsory vaccination statute. At the session of the Legislature of 1901, this subject was reviewed and presented with forcible emphasis because of the exigencies of the occasion in this regard. While the necessities of sanitation in this respect are not as pressing or as urgent now as then, yet the arguments in favor of providing such a protective measure to life and health are no less potent in argument or necessity. The Executive Department of the Board has a firm belief in the security which vaccination affords and an immunization which it gives against smallpox, and views the contention of transmitting other contagious diseases through the medium of cowpox virus as one of prejudice only, unsupported by any occurrence and in direct opposition to scientific facts. The non-susceptibility of the cow to syphilitic infection sets aside the possibility of transmission of syphilis through bovine virus, which, with the anti-vaccinationists seems to be the principal objection to vaccination. Where proper precautions

of cleanliness are exercised both in the operation and subsequent treatment of the wound, the scarification can be healed as aseptically as any other wound made under the surgeon's knife, and with but little discomfort, and no danger. It will always be found when due investigation and inquiry is made, that in all cases where painfully sore arms are paraded as object-lessons against vaccination, that carelessness in the individual to ordinary methods of cleanliness, such as lack of protection of the scarification from contact with soiled clothing, and from scratching with dirty finger nails, has been the direct cause of infection, and painful sores, and not to the insertion of the cowpox virus itself. Compared with disfigurement, scarred countenances and unconstitutional sequelae which oftentimes follow an attack of smallpox, although life itself may not be sacrificed, it is strange, indeed, to understand how intelligent and otherwise thinking and sensible people will permit the faddist of anti-vaccination to engage his or her attention for one moment by absurd, illogical and untruthful statements or by preposterous suppositions.

During the past year there have probably been vaccinated in the office of the State Board of Health, fifteen hundred school children in the City of Jacksonville alone, and there is yet to be heard one complaint of serious constitutional manifestation of vicarious infection or intensely sore arm, thus proving the assertion that when due care is taken and the operation is scientifically done, the danger to the health or life of the individual is absolutely negative, and the inconvenience so slight as not to be entitled to serious consideration when compared to the protection afforded against a most loathsome and dangerous disease.

Vaccina-
tion of
school
children.

From some of the other preventable diseases, such as diphtheria and scarlet fever, the State has suffered comparatively little during the year. Deaths from these disorders have been but few, and in almost every instance the disease has been traced to introduction from beyond the State confines; therefore, there is no question that neither of these two troubles is endemic in Florida. Where diphtheria antitoxin has been used sufficiently early at the commencement of the disease, recovery has followed, and an immunization given to exposed members

Other
communi-
cable
diseases.

of a family when proper care has been taken to anticipate possible seizure by the use of this remedy.

Dengue
and
Yellow
Fever

Dengue, which was so prevalent last year, has not been noticed at all this past summer. Neither have cases of yellow fever occurred, thus disproving the fears and theories of those who predicted a hibernation of the disease last winter with a recrudescence the following summer, from "left over" germs of the fever at Pensacola in 1905. These skeptics have been forced to acknowledge that the yellow fever infected mosquito of that year in Pensacola was then destroyed by scientifically approved methods. The victory won by the Board in 1905 over ignorance, prejudice and maliciousness, when in the face of much opposition and many obstacles of personally directed hindrance, yellow fever was forced to surrender to Science, was not only a triumph of advanced knowledge, but a victory for law and order, which it was predicted the State Board of Health would not be able to control or maintain. It is confidently said by others—not of the Board—citizens of the State—that the demonstration of a principle and its effective workings such as the Board conducted in Pensacola increased many times the confidence by the people in the ability of the Board to cope successfully with any emergency of disease conditions which might hereafter exist in the State. Neither is it thought that there is any longer doubt, certainly not generally entertained nor expressed, but that the *stegomyia* mosquito is the sole and only means of propagation and conveyance of the yellow fever germ, and with this knowledge and conviction comes the ever-increasing demand for well-screened houses and beds, to guard against the possibility of infection through mosquito bites of diseases of which the mosquito is known to be the intermediary of transmission to the human.

Yellow
Fever in
Cuba-

While the continuous existence of yellow fever in Cuba since the summer of 1905 by scattered cases, both in Havana and elsewhere on the island, has caused some apprehension during the past summer, yet the careful watching of conditions and a surveillance of travel from Cuba to the United States, and especially to the Gulf ports, by the representative of the United States Public Health and Marine Hospital Service Bureau at Havana, who kept the Executive Office of the Board promptly and frequently advised in regard to actual status of affairs, re-

lieved an otherwise anxiety, which, under other conditions, could not have failed to be very annoying. The splendid achievements of Gorgas and his associates in effectively ridding the island of yellow fever during the first occupation of Cuba by the United States forces (1898-1902), gives encouragement to the belief, as well as hope, that in this second occupation by American authority, through a provisional protectorate by the United States, a complete extermination of yellow fever may again be made, and likewise a permanently established system of sanitary control, which will prevent a reinfection of the island from other foreign countries, where the medium of the mosquito as a transmitting host is not yet as thoroughly accepted and practiced.

As tending greatly to a convenience of travel from Cuba, until yellow fever shall positively be known to be eradicated from the island, and at the same time afford protection against an introduction of possibly infected persons into the Gulf ports of the United States, it has been suggested that Trisconia, the emigration camp of the Cuban Government for Havana, which is located on a considerable elevation above the harbor, across the Bay from the City of Havana, and is a healthy site, might be utilized by the United States Government for a camp of detention and observation of passengers desiring to leave Havana direct for the Gulf ports, and thus serve to remove very uncomfortable and expensive conditions of travel from Havana, which quarantine regulations now require of Southern passengers leaving Havana by any of the Gulf steamers trading with Cuba during the summer months. The State Board of Health has always contended that the proper place to ascertain whether individuals are infected with yellow fever prior to embarkation, is at the port of departure. Observation of persons for a period known to be that of incubation of certain diseases, will determine whether the passenger has an infection in his or her system previous to taking passage, and thus avert an annoying detention for a similar observation at the port of arrival and perhaps a "holding up" of the entire ship's company in quarantine. This method of detention under observation prior to embarkation was practiced in Europe during the prevalence of cholera in Hamburg in 1902 when emigrants were segregated for a definite period and held under observation and daily examination to

Trisconia
as a deten-
tion camp.

prove their non-infection of cholera before being allowed to take passage for any port in the United States. Most certainly a system devised for detention of passengers at Havana, such as is suggested, will have the approval of the State Board of Health and of the traveling public as well. By the means recommended, passengers for Florida ports and for the Southern States immediately north of Florida could leave Havana during the summer months after spending a five days' detention at Trisconia Camp, and not be compelled to take an expensive, tedious and circuitous travel through the port of New York or other Northern ports, in order to return to their homes.

Tubercu-
losis.

In each Annual Report attention is invited to the alarming extent to which pulmonary tuberculosis prevails in the world, the means which are being employed to control its spread, and the charities which are engaged in aiding those hopelessly endangered by this disease, to prolong life in a comfortable manner, with no danger of infecting any who engage in this philanthropic work.

It is believed by those teachers and writers on the subject whose experience has been so extended in this line of work that they may speak with authority, that the plan which is now generally recommended to care for consumptives, and adopted in some States, meets with better success in treatment as well as in preventive methods, than any which has yet been devised. While the richer States of the country and some municipalities have built by Legislative and municipal appropriation attractive and expensive sanitarium for the care and treatment of consumptive patients, the consensus of medical opinion now seems to be to erect a number of small buildings for the treatment of this disease, rather than to segregate a large number of sick in one or more hospitals, which are always costly to construct and likewise expensive to manage.

Tubercu-
losis
Sanitarium
at Nar-
coossee,
Florida.

Some two miles distant from Narcoossee, in this State, a small settlement fifteen miles from Kissimmee, on the banks of East Tohopekaliga lake, Dr. John E. Ennis has established under the auspices of the "Tribune Sunshine Society of New York" an "out-of-door" consumptive home, where at his own expense principally, he has offered to any one who will comply with his rules and regulations an opportunity to prove the beneficial results of out-door

living to weak lung individuals as well as for those in the incipient stages of pulmonary disease. Dr. Ennis is a philanthropist. Himself a sufferer from pulmonary tuberculosis when he first came to Florida, he wishes others to be benefited in the same way that he has been: by practically living out doors, breathing into their lungs the wonderful healing properties of Florida's atmosphere, and paying strict attention at the same time, to well directed hygienic living. This effort of Dr. Ennis's toward caring for consumptives is the first well organized attempt to do anything for this unfortunate class, stranger-tourist or native, in Florida.

A desultory experiment was made at the Pensacola Navy Yard by the U. S. Government, but no benefit resulted, so it is said, and after a few years' trial of the scheme, it was abandoned—whatsoever the reason, it never was given out to the public.

A description of the Consumptives' Home at Narcoossee is here given by Dr. Ennis in his own language:

"The Narcoossee Sunshine Home and Sanitarium was organized in the summer of 1905; a full account of its inception, the result of the first season's work, its method of treatment, the names of the promoters, etc., was fully described in the 17th Annual Report of the State Board of Health. It may prove interesting to the physicians of our State to know that the institution was incorporated under our State laws June 26th, 1906. This enables us to own property and insures permanency. One year past the Brewer property was purchased, and has been fully paid for. This property is one of the finest places in Osceola County. Some six thousand dollars have been expended in various improvements, such as buildings, water works, barns, a pineapple plant, lawns and shrubbery.

"Since the purchase, our corporation has expended several thousand dollars for tents, cottages, vehicles, furniture, and various appliances for the comfort of the invalids.

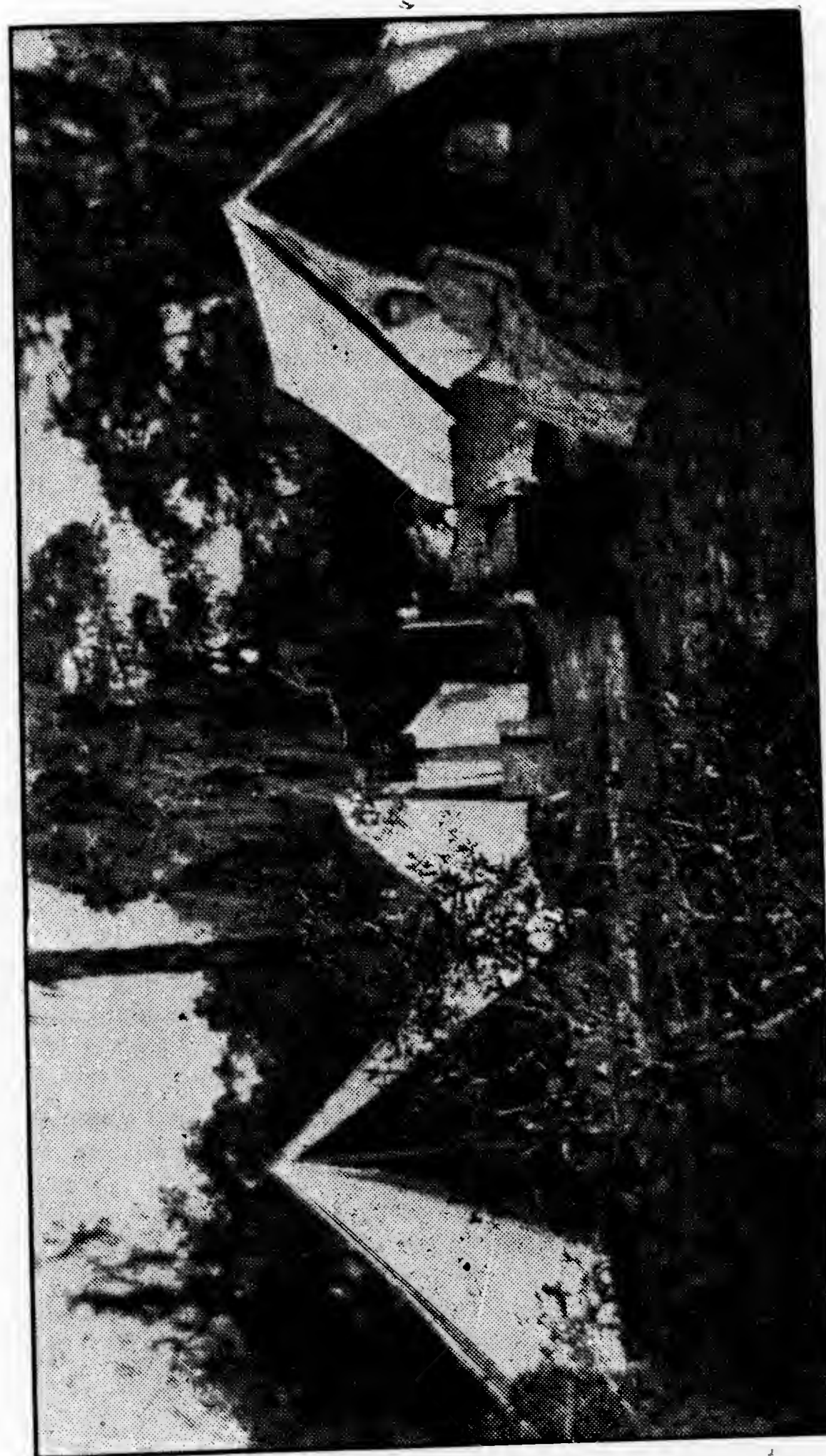
"The means to develop this institution have been furnished almost entirely by a few Northern and Southern ladies. Some opposition was manifested at first to collecting such invalids in this location, but this has passed away and at present we have the sympathy and good will of nearly every citizen living in this vicinity.

"The corporation is entirely altruistic; not one official, from the matron to the president, has ever received

any compensation for services rendered. The receipts are all applied to maintaining a high service for the sick and in various ways improving the grounds. At prices named in our circular there is a deficit every month, which is provided for in various ways by the members of the corporation.

"We have been fortunate in securing one of the finest locations in the State for treating tuberculous diseases. The property of the corporation is situated on a ridge of land fronting on Lake Hendon, at an elevation of twenty feet above the water. The ridge—save where cleared—is covered with a growth of spruce pine and live oak. The water view of nearly a mile of the lake is greatly admired by all visitors. The administration building is situated in an inclosure—mostly lawn—of five acres. It is a commodious and pretty cottage, containing the office, dining-room, kitchen, reception hall, guest's room and bath. It is surrounded by a wide veranda on three sides. It is intended to use one of the verandas for a sun bath and palm garden. In the same inclosure we have two cottages, one named the "Alice," the gift of a lady resident of New Jersey, the other a donation of the Chelsea Branch of the Tribune Sunshine Society of New York City; also a number of furnished tents—principally Boyle's hygienic. For a limited number of patients we are now prepared to offer consumptives high-class accommodations. The treatment is the most approved, as recommended by State and national associations, consisting of pleasant environments, nutritious food, deep breathing and open air life and restricted exercise. Medication directed solely towards tuberculosis is withheld save in the inhalation of ozoned vapor, which at once destroys all bacilli that can be reached. Sympathetic diseases such as constipation, indigestion, ulceration of throat, etc., are treated as would be done in any non-tuberculous patient. Consumptives demand, and should have, constant mental treatment. Their minds must be occupied so fully that there is no time to brood over their condition. Their temperature and weight should be frequently taken, but only known to their physician, save when indicating improvement. The daily routine here is to furnish three good meals and three simple lunches, fruit in abundance, frequent baths, short walks, riding or driving, boating and fishing for men who desire it. Daily papers, magazines and books are furnished in abundance; a piano and fine phonograph are kept to fur-

Treatment.

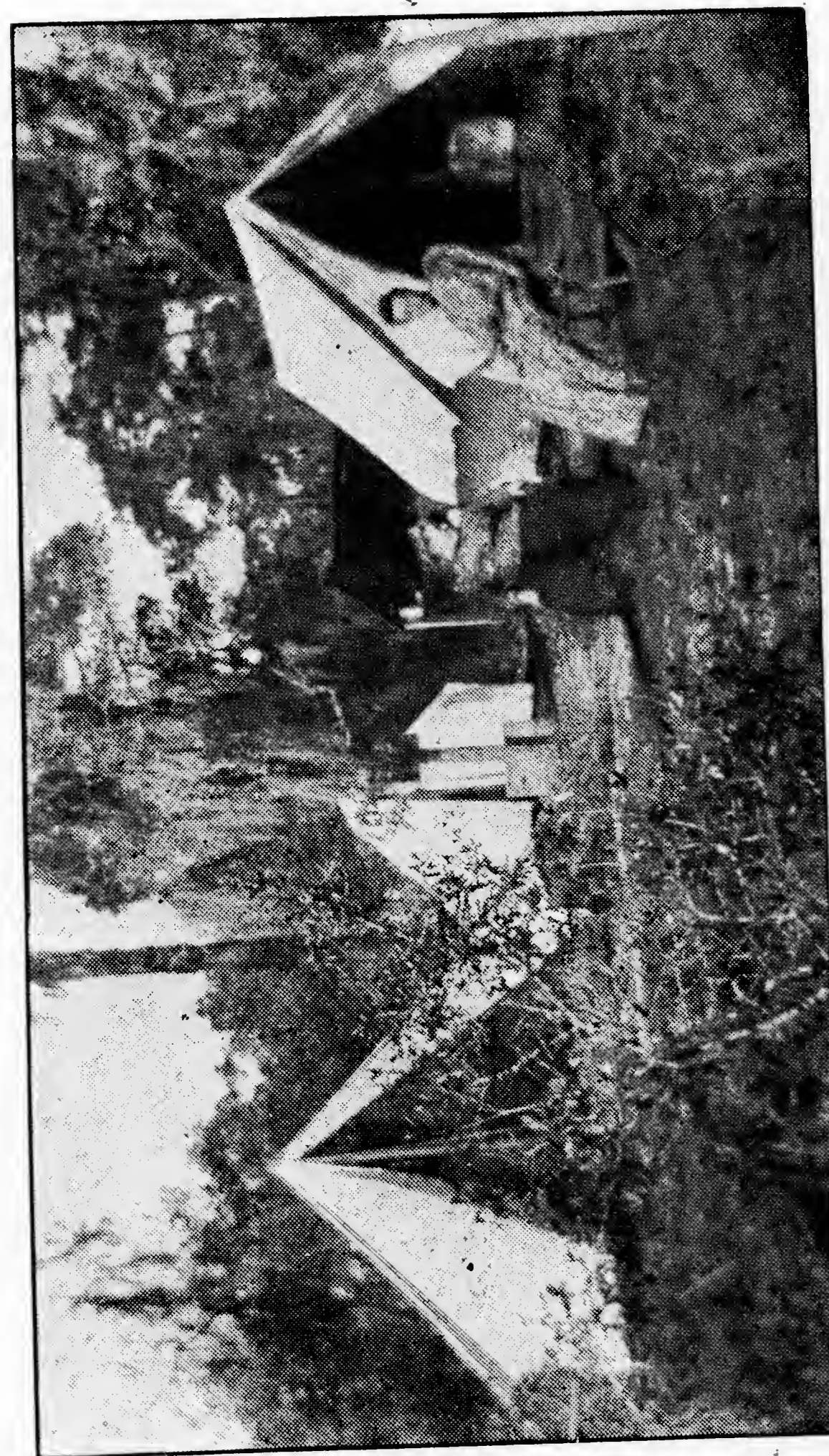


Scene at Dr. Ennis' Sanitarium for Tuberculosis,
Narcossee, Fla

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Treatment.



Scene at Dr. Ennis' Sanitarium for Tuberculosis,
Narcoossee, Fla

Offer to
Indigent
Consump-
tives.

nish music. There are some persons not able to pay the rates named in our circular, hence desire to board themselves. To all such we offer free of any expense a fine camp site in our wild wood park just west of the administration building; some fruit in season; and medical attendance; also an abundant supply of reading matter. Will deliver their mail and provisions daily. They will be treated as kindly as any paying guest.

Our Aim. "Our purpose is to enlarge from time to time until we can furnish to every citizen of Florida, suffering from tuberculosis, a place of refuge comfortable, even luxurious, with facilities for treating the disease second to none in the land; to obtain, if possible, the name and address of every family in which there is a consumptive without medical assistance, and to extend to such all aid we can render. In this movement we have had generous aid from the press, notably, Everybody's Magazine, The New York Tribune, Times-Union and Kissimmee Valley Gazette. To the assistance and encouragement given us by the State Board of Health we ascribe in a measure the greatest factor of our success. If ever our ideal Sanitarium is a reality, the credit will be largely due to the efforts of President E. M. Hendry, Health Officer Dr. J. Y. Porter and his assistant, Dr. H. Byrd, of the State Board of Health. I cannot close this letter without mentioning the names of Mrs. Thos. McLean of Conant, Fla., and Mrs. Jane Pierce of New York City, who have labored so actively and persistently in behalf of our effort. Mrs. Pierce has collected from her friends and remitted to our treasurer more than two thousand dollars to be used by our corporation, and in addition has given us much of her time in the purchase of supplies.

"This institution desires to keep in close touch with all State physicians, and to this end invites inspection, by every member of the State Medical Association.

"What are you going to do, my brother-men, for this higher side of human life? What contribution are you going to make of your strength, your influence, your money, your self, to make a cleaner, fuller, happier, larger, nobler life possible for some of your fellow men?"—Henry Van Dyke.

"Yours truly,

"JNO. E. ENNIS, M. D."

And, Dr. Hiram Byrd, the First Assistant to the State

Health Officer, confirms the same in a report here given, on an examination and inspection of the property, which was made at the request of Dr. Ennis:

"Jacksonville, Fla., Nov. 28, 1906.

Dr. Joseph Y. Porter,
State Health Officer,
Jacksonville, Fla.

Dear Doctor:

Complying with Dr. Ennis's request and your directions, I beg to report that I visited the Narcoossee Sunshine Home on November 23rd, returning on the 24th, and found it in about the following condition:

The Home is situated some two miles from the little village of Narcoossee, between Lake Hendon and Lake East Tohopekaliga, the lakes being one-quarter to one-half mile apart at this point. There are twenty-two acres of land in the tract, bordering on Lake Hendon, but another tract leading from this property to Lake East Tohopekaliga has been promised, which will give a water outlet from the grounds to Kissimmee. Lake Hendon is a beautiful lake, almost circular, with a sandy beach. Its diameter is one-half to probably three-quarters of a mile. Lake East Tohopekaliga is a larger lake, being one to two miles wide and seven or eight miles long, and by a narrow strait or canal is connected with Lake Tohopekaliga on which Kissimmee is located. The land surface is slightly undulating and has its original forest. It is well covered with yellow pine, here and there an oak interspersed, and just a little undergrowth.

Improve-
ments-

The improvements are worth probably \$6,000, and consist of a house of some five or six rooms, which is to be used as the administration building, dining-room and library. There is also a barn, a pinery of one-quarter acre, in bearing, a garden, also a small orange grove in bearing. For the accommodation of the patients, tents are kept on hand to fill in emergencies, but it is proposed to build small cottages for the permanent use of patients. One of these small cottages is already constructed and simply furnished at a cost of about \$150. It has a door at one end, a French window at the other end, a French window at one side, and a double half window at the other side, making ventilation possible from the four sides. It is furnished with a white enamel iron-bed, two chairs, a small dresser, wash stand, and the walls deco-

rated at present with a copy of St. Cecilia. The night of the 23rd, my visit, I occupied this cottage and found it very comfortable. Other cottages will be constructed as needed and as the institution grows.

Site. While the Sanitorium is only in its infancy, the site is an ideal one and has possibilities that are rare.

Treatment. The line of treatment is the most approved, consisting of pleasant environments, nutritious food, and open air. This does not mean that all medication is withheld. It simply means that medication directed solely towards tuberculosis, is withheld. When any other concurrent trouble arises, as constipation, for instance, it is treated as it would be in a non-tuberculous subject.

You are thoroughly informed of the history of this enterprise; how Dr. Ennis, himself a tuberculous subject, came to Narcoossee several years ago and recovered; and how in the goodness of his heart, he conceived that it would be an ideal camping place for "lungers" and therefore tendered them his private premises, together with water and a reading room, for such as might want to take advantage of it; and how, during the winter, some fifteen patients from the North and South came to Narcoossee and camped, all of whom improved, and many of them apparently recovered; and how the movement was taken up by Everybody's Magazine and by the Tribune Sunshine Society, giving publicity and encouragement to it; and that as a result of all this, the present embryo of what ought to become a well equipped out-door sanitarium, has been established.

In its inception, it was purely philanthropic and it so remains to the present day. Dr. Ennis in fact, prefers not to have wealthy patients, for the reason that they can go to other sanitarium that are more expensive. He desires that accommodations at this place be reserved for the poor people, especially of Florida, who are unable to take advantage of other sanitarium.

This philanthropic and humanitarian enterprise should have the richly merited support and encouragement of every citizen of the State.

Very truly yours,

HIRAM BYRD,
First Assistant to State Health Officer.

Dr. Ennis offers to donate in fee simple to the State Board of Health of Florida, for the use of consumptive citizens of the State, and, undoubtedly, for those of other States whose residence is in Florida, this valuable property, provided that the Board will appropriate adequate funds to carry on the experiment a sufficient length of time to determine the feasibility and practicability of such philanthropy.

Dr. Ennis's
offer to the
board.

It is recommended, therefore, that the generous offer of Dr. Ennis be accepted and that the coming Legislature be asked for an appropriation or to give permission to the State Board of Health to expend at least \$10,000 a year, or so much thereof as may be necessary, to demonstrate whether the Institution, conducted upon a plan for the open air treatment of consumption (pulmonary tuberculosis) can be successfully conducted to the benefit and cure of this class of disease. The management now suggested for suppressing pulmonary tuberculosis, as well as in treating the same, is no longer advised to be that of hospital supervision alone. District nurses, to visit consumptives in their homes, are taking the place of ward medication. How to live hygienically, that is to say: eat proper food, be cleanly in personal habits, dispose of sputum aseptically, and above everything else, to have an abundance of pure wholesome air, is superseding the former practice of drug medication and lessens the bleeding of the patient's purse by nostrums of many kinds which fill the advertisement sheets of the daily press and too often the pages of secular journals. There is an old and familiar aphorism which says that "drowning men catch at straws," and this quaintism applies to consumptives with perhaps greater forcibleness. Looked upon with fear by relatives and acquaintances, and shunned by strangers, the consumptive eagerly snatches at any chance held out for relief and easily falls a victim to artful charlatans.

Reference to former reports of this character will show that the State Health Officer has treated this subject for many years with minute detail, to a proper care and management of the consumptive citizen, and has outlined a plan in almost precisely the same language as has now been mentioned. Colonization of consumptives in the pine forests of the State, remote from large settlements, has always been thought to be the rational way to

deal with this disease. Cottages of two or more rooms, tightly but economically built, or tents, are far more desirable for occupancy by this class of patients than hospital sanitarium or many room residences. It is hoped that the offer of Dr. Ennis may find a ready, responsive acceptance by the Board and by the forthcoming Legislature.

Hydrophobia.

The serenity which generally prevailed in health matters during the past year was only ruffled in a slight degree by the occurrence of a few cases of hydrophobia in two or three places of the State. At and around Reddick and in Jacksonville, there were several distressing deaths from accidents incident to rabies, a phase in State sanitation which is not remembered as having before occurred for many, many years. In each instance where it was suspected that animals had contracted or were infected, the Sheriff of the county was instructed to segregate or cause to be segregated the dogs thus suspicioned, and when a case fully developed, to kill the animal. In Jacksonville, a city ordinance compelling the muzzling of all dogs running at large was enacted, and when the requirement was not heeded, animals were killed by police officers.

The report of the Veterinarian of the Board, Dr. Charles F. Dawson, treats on this subject in dealing with disease conditions during the year affecting the lower animals of the State, and attention is invited to what he has to say on the subject of rabies, by those who are especially interested in this matter.

Report of
the Veteri-
narian

DR. CHAS. F. DAWSON,
Veterinarian State Board of Health.

*Dr. Joseph Y. Porter,
State Health Officer,
Jacksonville, Fla.*

Sir:

I have the honor to present my annual report for the year 1906.

The work of this branch of the State Board of Health has grown in importance during the year, as indicated by the increasing number of letters which reach the writer through the office, from the Florida Agricultural Ex-

periment Station, of which he is Consulting Veterinarian, and by direct correspondence.

Fortunately there have been no serious outbreaks of glanders as in past years, although a few isolated cases have been investigated. Cases of hydrophobia in dogs that have bitten people, seem to have increased somewhat over former years. Mention of these will also be made in the report of the Bacteriologist, who had to do more particularly with the actual determination of the disease in specimens collected from the affected animals. In all cases where Negri bodies have been discovered in the brain of the suspected animals, the bitten persons have been advised to take the Pasteur treatment at the Pasteur Institute in Atlanta, Georgia.

Glanders
and Hydro-
phobia.

In March, I was directed by you to investigate the reports of the existence of bovine tuberculosis in the dairy cattle at Tampa. A local veterinarian had been testing all herds supplying milk to the city, under private contract, and according to a city ordinance. He had used the tuberculin method of testing, and requested a verification of his diagnosis by the State Board of Health. A post-mortem examination of one of the reacting animals showed unmistakable signs of the disease, and my diagnosis was later verified by the Bacteriologist. The investigations showed the disease was quite prevalent, and that the hygienic conditions of many of the Tampa dairies were in a deplorable condition. In justice, it must be said that the so-called American dairies compare very favorably with those of other sections, and that little or no disease was found in them and that they are in good sanitary condition.

Bovine
Tuberculosis
in Tampa.

The substance used in making the test sells under the name Tuberculin. It is a glycerine extract of old liquid cultures of the bacillus of tuberculosis. In making the test, the cattle are kept up for two days in a quiet, cool place and fed and milked as usual. During the first two days the rectal temperature is taken with the clinical thermometer every two hours to establish the normal temperature curve for each individual animal. In the bovine species the normal temperature varies, in comparison with man, to a marked degree. It is not uncommon to find a variation of two or three degrees in twenty-four hours. In three well known herds that were tested; the average tempera-

Tuberculin
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Tuberculin
test.

tures of the animals was 102.5 degrees, 102.6 degrees and 101 degrees Fahr. respectively. The tuberculin test is very delicate, and the elevation of temperature indicating a reaction may be less than the normal variation, hence the absolute necessity of obtaining the normal variation for certain period before applying the test. The general rule is to require at least a rise of 1.5 degrees of temperature above the highest normal, as determined on the day previous to the injection. The tuberculin is injected at any point under the skin, usually at the shoulder, and the temperature is taken every two hours beginning at the sixth or eighth hour after the injection, and is continued for eight or ten hours. An animal with a fever cannot be tested with tuberculin.

Rabbies

Rabies, or hydrophobia, has demanded considerable attention not only from this department, but also from the Bacteriologist. In March, while on a visit to Tampa to investigate a reported case of glanders, I was asked to visit a horse that had been bitten in the nose by a dog which was supposed to be rabid, on the 6th of February. The wound was cauterized by a local veterinarian in about an hour after the bite. The horse exhibited on March 16th all the symptoms of rabies, viz., great excitement, altered voice, pawing, biting itself and the stall, irritation of the genito-urinary tract, rapid respiration and fever. At my advice, the animal was destroyed by an officer of the local Humane Society.

Rabbies at
Whitehouse,
Duval
county

The next outbreak of rabies occurred at Whitehouse a small settlement in Duval County, on the S. A. L. Ry. A strange dog appeared there on the 9th of April, bit four dogs and was finally killed. I advised that all the bitten dogs be chained for at least a month. On the 27th of April, I again visited Whitehouse to inquire as to the condition of the dogs that were bitten, and the owners all reported them as well. On the 29th a telegram announced that three of the dogs at Whitehouse had "gone mad," that two had been killed and that one had escaped. I visited the town again the same day and found the following conditions existed: Of three dogs that were bitten by a rabid dog on the 9th instant, one had developed rabies, and before being destroyed, had bitten two puppies, a pig and a chicken. As the owners seemed loath to either chain or destroy the bitten animals, I recommended that the Sheriff of Duval County be requested to instruct his deputy at Whitehouse to require all dogs to be heavily chained for an

indefinite period. Several cases came under the notice of this department as having occurred in Jacksonville, and as they were cases in which the Bacteriologist was more particularly interested, a report on them is omitted here.

On October 9th, I was directed to visit the city of Reddick to investigate a reported outbreak of rabies there. The first case appeared in a dog which came there on August 27th from Grahamville. It was reported that the animal had bitten several dogs at McCoy and that these had been killed by the sheriff. One child was bitten at Evinston, and was sent to Atlanta for the Pasteur treatment. Eight dogs, one horse, three hogs and a calf were bitten at Reddick. The first dog to show the disease came down with it in two weeks. The horse died of the disease on the 30th day. All the animals that were bitten either died of the disease, or were killed by the owners, except two dogs and a sow. During the height of the outbreak, and before my visit, the City Council of Reddick had passed an ordinance prohibiting animals on the streets, and the City Marshal had strictly enforced the law. This prohibition was about to be raised at the date of my visit, but I advised the Mayor to continue it for another month and requested the City Marshal, who is also a deputy sheriff, to quarantine the two dogs and sow on the owner's premises.

Rabies at
Reddick,
Marion
county.

There were fewer cases of glanders in the State than in former years, and it is highly probable that the unprincipled dealers, who formerly found Florida such a good market for their "stuff," have become aware that notice is being taken of their dishonesty, by the State Board of Health. The people have been cautioned in every section visited to be more careful in purchasing recently-shipped western horses. In some places, where the losses have been heavy, these dealers would probably be invited to "move on" if they appear again.

Glanders.

On April 24th I was directed to visit Altamonte Springs to inspect a mule supposed to be affected with glanders. About two months previously, the owner had bought a large, black horse from a band of gypsies. The animal was put to plowing with a fine, large mule. The horse soon began to discharge from the nose. In "doctoring" the animal, the neck of the drenching bottle was accidentally broken off and cut a large artery in the horse's throat, and he died of hemorrhage. Shortly after, the mule was

Orange
county.

tures of the animals was 102.5 degrees, 102.6 degrees and 101 degrees Fahr. respectively. The tuberculin test is very delicate, and the elevation of temperature indicating a reaction may be less than the normal variation, hence the absolute necessity of obtaining the normal variation for certain period before applying the test. The general rule is to require at least a rise of 1.5 degrees of temperature above the highest normal, as determined on the day previous to the injection. The tuberculin is injected at any point under the skin, usually at the shoulder, and the temperature is taken every two hours beginning at the sixth or eighth hour after the injection, and is continued for eight or ten hours. An animal with a fever cannot be tested with tuberculin.

Rabies

Rabies, or hydrophobia, has demanded considerable attention not only from this department, but also from the Bacteriologist. In March, while on a visit to Tampa to investigate a reported case of glanders, I was asked to visit a horse that had been bitten in the nose by a dog which was supposed to be rabid, on the 6th of February. The wound was cauterized by a local veterinarian in about an hour after the bite. The horse exhibited on March 16th all the symptoms of rabies, viz., great excitement, altered voice, pawing, biting itself and the stall, irritation of the genito-urinary tract, rapid respiration and fever. At my advice, the animal was destroyed by an officer of the local Humane Society.

Rabies at
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Duval
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Orange
county.

taken sick with a discharge from the nostrils, and when I saw it, was suffering from acute glanders. The animal was killed immediately and buried. As no other animal had come in contact with the mule, the disease did not spread.

Hillsboro
county.

On June 8th, a report of an outbreak of glanders at Tampa was received from a local veterinarian. I responded to the call, on the 10th, and tested eleven head of mules and five head of horses, all of which proved themselves free of the disease.

Escambia
county.

In September a report reached me from Pine Barren, Escambia County, of the existence of a case of glanders in a mule. I took up the matter with the owner through correspondence and was able to pronounce it a case of lymphangitis.

Orange
county.

On Sept. 29th, I visited Zellwood, Orange County, in response to a telegram seeming to indicate the animal was glandered. When I reached the place the animal had died. The history of the case showed it to have been a case of purpura hemorrhagica. On Nov. 14th glanders was reported as existing near Arcadia. I visited the place indicated and found that one animal had been destroyed and that the other one, a small native mare pony, was badly affected with glanders. She had been isolated for some time; but I tested another horse and a three-months-old colt, both of which showed themselves free of glanders. The owner of the glandered animal was directed to destroy and burn or bury it, and how to disinfect his barn. In this outbreak the original case was a horse which had been purchased at Wauchula two years ago, and was, no doubt, one of the lot of western animals which missed inspection at Zolfo Springs during the extensive outbreak there in September 1903.

Anthrax,
Hillsboro
county.

The department's aid has been asked in numerous instances which are omitted in this report, except the following which seem worthy of record:

In May, a case of anthrax or charbon was reported in a Greek sponger at Tarpon Springs. The physician had operated and completely enucleated the tumor on the patient's lip, and it was therefore useless to make a preparation for microscopic examination.

Marion
county.

A hog disease at Oak, Marion County, supposed to be hog cholera, was, in reality, an infestation with the so-called kidney worm, *Sclerostoma pinguicola*. The disease

seemed quite prevalent in the locality at the time. Plowing the pastures and burning the carcasses was the only remedy that could be suggested.

In July, hogs were reported to be dying at Longwood, and I investigated the sickness. From the history of the conditions, and a post-mortem on a freshly-killed pig, I was of the opinion that the hogs were dying of a corrosive poison. As the detection of crime is foreign to the work of the State Board of Health, the subject was not investigated further.

Orange
county.

An outbreak of hog cholera was investigated at Welborn, Suwannee County, and treatment, hygienic as well as medical, suggested.

Hog chol-
era in
Suwannee
county.

In September, several Shetland ponies belonging in Jacksonville, sickened and died. The clinical history and post-mortem examination indicated the disease was cerebro-spinal-meningitis or forage poisoning.

On November 21st, I inspected a cow at McIntosh supposed to have tuberculosis. The animal had a high fever, was emaciated, and had a cough. A post-mortem examination showed the trouble to be traumatic pneumonia due to the passage of a nail through the stomach wall into the lungs.

Marion
county.

In December, the Agricultural College dairy herd of fifteen head was tested with tuberculin for tuberculosis, and showed themselves free of the disease.

In November, the writer was invited to present a paper on "Diseases of Cattle in Florida" at the Seventh Annual Convention of Southern Commissioners of Agriculture. In December he was the official representative of the Florida State Board of Health at a Convention of Southern Sanitarians, State Veterinarians and Officials of the Federal Department of Agriculture, held at Nashville, Tenn., for the purpose of discussing the question of Tick Eradication. The report upon this meeting follows:

Tick eradication.

Early in November a convention of Southern Sanitarians, State Veterinarians and Officials of the Federal Bureau of Animal Industry met at Nashville, Tenn., for the purpose of discussing the practicability of eradicating cow ticks from the United States and for the reception of reports from the various infested States upon the work that has already been accomplished along this line. The States represented were Alabama, Arkansas, California, Georgia, Kentucky, Louisiana, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia,

District of Columbia and Florida, the writer representing the latter.

At its last session, Congress appropriated \$82,500.00 for the purpose of inaugurating the work and testing its feasibility. The reports presented at the meeting showed that considerable progress had been made in Virginia, North Carolina and Georgia, and that during the five months in which tick eradication had been practiced, 50,000 square miles of territory have been cleared of cow ticks, an area equal to the State of Florida. This is considered by experts to be a remarkable showing and it was decided at the convention to ask Congress to appropriate \$250,000 at its next session, to continue the work.

The method that has been followed generally, is about as follows: As a prerequisite for inaugurating the work, a State must have a law under which animals can be kept quarantined on the owner's premises. Upon request from such States, a Federal Veterinary Inspector is detailed to work with the State Veterinarian or other constituted authority. In each county or district, lay inspectors are appointed. These are selected from the best class of citizens that can be secured, and they receive about \$50 per month for their services. The money for this purpose and for the purchase of insecticides is obtained from the Federal appropriation, and each infested State which applies for Federal aid is expected to make an appropriation and to show it has ample law for the enforcement of quarantine of animals upon the owner's premises.

FREEING THE CATTLE AND PASTURES OF TICKS.

Cattle can be freed of ticks by several methods. One of these is to pick off the ticks by hand. This is only applicable where there are a few animals and where it can be persisted in over a long period, as the ticks become large enough to be seen. Poultry are very fond of the ticks and could be substituted.

Another method is to spray the cattle with insecticidal solutions and with Beaumont crude petroleum, or a mixture of one gallon of kerosene, one gallon of cottonseed oil, and one pound of sulphur, two or three times a week during the tick season.

As a general proposition, and where the work is done by ordinary labor, these methods result in controlling the number of ticks and not in eradicating them.

DIPPING IN A VAT.

The Bureau of Animal Industry has experimented for several years with dipping solutions and has found that Beaumont crude petroleum containing sulphur in solution is the most desirable. The oil must have a specific gravity of between 22 1-2 and 24 1-2 degrees Beaume, and must contain 1 1-2 per cent. of sulphur in solution. These specifications must be stated in purchasing the oil. Plunging large animals into a liquid is a severe shock and frequently damages the animal unless the liquid is of the proper consistency. The above has been found to satisfy all requirements when the animals are protected from the cold or heat after dipping and when the hair has been shed. Such an oil costs about six cents a gallon when purchased in barrel lots. Dipped animals should not be shipped for at least four days.

THE "SOILING" METHODS.

Dr. Cooper Curtice has suggested the following method of freeing cattle of the tick, based on our knowledge of the life history of the tick. When the female tick becomes filled with eggs, she drops off the cow and lays her eggs. In three weeks these eggs hatch. These young or seed ticks get on cattle and in from twenty to forty-five days have reached maturity. Hence, when it is desired to free cattle of ticks, all one has to do, is to place the ticky animal in a tick-free pasture, one that has had no cattle on it for four months and allow them to remain there for three weeks, by which time the remaining ticks will have matured and dropped off, and a close examination will probably show them entirely free of ticks. Should they still show ticks, they must be placed on another tick-free pasture for two weeks to allow the remaining ticks to develop and drop off. The animals are now tick-free, and can be placed on a tick-free pasture, one that has had no cattle on it for four or five months.

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nor should the hay from these or other ticky pastures be fed the animals until it is of similar age, as it will reinfest the cattle, because it harbors seed ticks for this period of time.

HOW TO FREE PASTURES OF TICKS.

Free the cattle of ticks on Sept. 1st, by dipping or the thorough application of the oil. Place them in a cultivated field or pasture where no cattle have been for six months, and where they cannot come in contact with ticky animals. On the 1st, of the following April, the ticks that were in the original pasture will have died and the now tick-free animals can be returned.

Another method of destroying ticks on pastures is to cultivate the soil for a year without allowing any ticky cattle or horses on it. The pasture may then be stocked with tick-free animals.

Pastures that are too large to cultivate may be burned off and stocked with tick-free animals after the pasture has recovered.

FREEING CATTLE AND PASTURES OF TICKS AT THE SAME TIME.

This method, called the "feed-lot" method, is, like the "soiling" method, based upon the life history of the cow tick, and is as follows:

Sow a field with corn, millet, sorghum, or other forage and fence off three lots within the field. Place the ticky animals in lot No. 1 on June 1st. In three weeks, during which time many of the ticks will have dropped off, the cattle are to be moved to Lot No. 2, where they are kept for another three weeks. Examine the cattle now, and it is likely a few ticks will still be found on them. Remove them to Lot No. 3, for two weeks longer, when they will be tick free, and can be turned out on the field containing these three feed lots, which is tick free. The feed lots can now be plowed and planted to crops, but the cattle must be kept in the forage field until the middle of November or later, when all the ticks that were on the regular pasture will have died of starvation from the cattle having been excluded since June 1st. In building the fences of these feed lots it is necessary to have the bottom rail of the

fence rest on the ground to prevent ticks from crawling under. The easiest way to accomplish this is to run a furrow up against the bottom rail or board. Ticks will not climb or be blown over such an obstacle. In driving the cattle from one lot to another, they should not be driven through the forage field, but through an adjoining pasture, so as to prevent ticks from dropping off in the forage field and reinfesting it.

By "pasture rotation" cattle may be freed of ticks in the following way: Divide the pasture into two parts by a double line of fence with a ten-foot space between the lines to prevent the ticks from crossing from one pasture to the other. Throw up a furrow against the bottom rail of such fences. Exclude the cattle from the first half of the pasture, or pasture No. 1, from June 1st to Nov. 10th, by which time this pasture will be free of ticks. The cattle are kept in the other half or pasture No. 2, from June 1st to September 10th, when they are removed to a forage pasture No. 3, where they remain until Sept. 30th. They are then removed to another forage pasture or No. 4 until Oct. 20th. They are then transferred to pasture No. 5, where they are kept until Nov. 10th. They are then returned to pasture No. 1, which is now, as well as the cattle, tick free. The double fence placed across pasture No. 1, may now be removed. The cattle should remain in pasture No. 1 until May, by which time the ticks in pasture No. 2 will have starved; there having been no animals there since September 10th. It is highly important that the bottom rail of all the fences between the pastures shall be in contact with the ground to prevent ticks from crossing from one pasture to another, and that in changing the animals they are not allowed to become reinfested with ticks. This can be obviated by arranging all the forage pastures side by side and taking down a panel of fence when the changes are to be made.

The common cow tick is the carrier of a parasite which causes a specific fever in animals. Its natural habitat is that part of the United States where the winter temperature is not inimical to its growth. This area is well defined and while it is changed from time to time by proclamation of the Federal Secretary of Agriculture, it includes nearly the whole area known as "The South." Roughly, the quarantine line starts in the Atlantic Coast at the boundary line of Virginia and North Carolina, runs westward a

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The tick's habitat.

short distance, ascends as far north as Richmond, runs southwesterly through Virginia and North Carolina, below the mountainous portions of these States, to a point a short distance below the northern border of Georgia. It then ascends northwesterly, then westerly through southern Tennessee to the eastern border of Arkansas, where it rises to the northern border, which it traverses westerly to the eastern border of Indian Territory. It now rises to the northern border of Indian Territory and Oklahoma, passes in an irregular southwesterly course through Oklahoma to the middle of the northern border of Texas, through which State it runs stair-step fashion southwesterly to the Mexican border. It now follows the course of the Rio Grande River to the southeast corner of California, ascends along the Colorado River to the Southern portion of Nevada, passes up the western border of that State nearly as far north as a point opposite Lake Tulare or the 36th parallel; then northwesterly to the 119th meridian, then westerly to the Pacific Coast, near the mouth of the Salinas River.

All cattle south of this line are known in the cattle markets as Southern cattle, and the national quarantine laws regard them as being dangerous to all cattle raised above the line. Hence, all Southern cattle are quarantined for most of the year and can only reach the Northern markets when the quarantine is raised during the colder winter months, except they are shipped for immediate sale and slaughter. This latter requirement, forcing the sale of Southern cattle, means they cannot compete with Northern cattle in price, because they cannot be held for a favorable market, but must be sold for what they will bring on arrival. This is a serious blow to the cattle business of the South and is one chief reason why the cattle business is not greater in the South. Immigration to the South is also thereby restricted. On account of these restrictions, Southern cattle bring one-fourth to one-half a cent less per pound than the market price. This means \$1.50 per head less for animals weighing 600 pounds. The South markets about 70,000 head annually; hence the loss from this source alone is over a million dollars a year. In this way the value of those cattle which remain in the infected territory is also fixed, and the assets of the cattle industry of the South are reduced to the same ratio.

Hence, there being 15,000,000 head of cattle south of the

quarantine line, their loss in value in the Northern markets because of the presence of the tick is \$22,500,000. There are numerous other losses, such as decrease in milk production, deaths in pure-bred cattle brought into the South, deaths of non-immune Southern animals and others, making a grand total loss, according to one writer, of over \$40,000,000 annually to the country east and west of the Mississippi River south of the quarantine line.

It is on account of this enormous loss and the fact that cattle production in the South should be encouraged, that it has been determined to eradicate the cow tick. That this is practicable, has been shown in several States. In Virginia and in North Carolina, several counties have been freed of the tick and have therefore been placed above the quarantine line. What has been done in this line on a single farm, or in a county, can be done in a whole State or in every infested era.

FLORIDA'S POSITION WITH REGARD TO TICK ERADICATION.

Florida and Louisiana are peculiarly situated in regard to the cattle quarantine line, in that they are the only States which are bounded on the north by a State which is, itself, wholly or almost wholly south of the line. Louisiana has Arkansas on its north, and the northern boundary of Arkansas is part of the quarantine line. Florida has on its north Georgia and Alabama, both of which States are nearly wholly south of the line. We have seen how the tick inhabits the cattle industry in all the infested area and the enormous money losses it causes, and its effects on immigration; and the question now arises, what ought to be Florida's attitude in the matter of tick eradication? Unquestionably, if Florida had cattle to sell in the Northern markets, she ought to begin the eradication of the tick at the earliest opportunity; but Florida has no such market. Her cattle market, generally speaking, is Cuba. Cuba is infested with the cow tick, and if Florida sent to Cuba cattle which had not been infested with the cow tick from birth up to maturity, they would die in such numbers when they reached that island, that there would soon be no market in Cuba for Florida cattle. The inferior animals we send Cuba would find no market in the North in competition with the cattle from other sections; hence it would seem that as the business now stands, Florida would lose by eradicating her ticks. Our

short distance, ascends as far north as Richmond, runs southwesterly through Virginia and North Carolina, below the mountainous portions of these States, to a point a short distance below the northern border of Georgia. It then ascends northwesterly, then westerly through southern Tennessee to the eastern border of Arkansas, where it rises to the northern border, which it traverses westerly to the eastern border of Indian Territory. It now rises to the northern border of Indian Territory and Oklahoma, passes in an irregular southwesterly course through Oklahoma to the middle of the northern border of Texas, through which State it runs stair-step fashion southwesterly to the Mexican border. It now follows the course of the Rio Grande River to the southeast corner of California, ascends along the Colorado River to the Southern portion of Nevada, passes up the western border of that State nearly as far north as a point opposite Lake Tulare or the 36th parallel; then northwesterly to the 119th meridian, then westerly to the Pacific Coast, near the mouth of the Salinas River.

All cattle south of this line are known in the cattle markets as Southern cattle, and the national quarantine laws regard them as being dangerous to all cattle raised above the line. Hence, all Southern cattle are quarantined for most of the year and can only reach the Northern markets when the quarantine is raised during the colder winter months, except they are shipped for immediate sale and slaughter. This latter requirement, forcing the sale of Southern cattle, means they cannot compete with Northern cattle in price, because they cannot be held for a favorable market, but must be sold for what they will bring on arrival. This is a serious blow to the cattle business of the South and is one chief reason why the cattle business is not greater in the South. Immigration to the South is also thereby restricted. On account of these restrictions, Southern cattle bring one-fourth to one-half a cent less per pound than the market price. This means \$1.50 per head less for animals weighing 600 pounds. The South markets about 70,000 head annually; hence the loss from this source alone is over a million dollars a year. In this way the value of those cattle which remain in the infected territory is also fixed, and the assets of the cattle industry of the South are reduced to the same ratio.

Hence, there being 15,000,000 head of cattle south of the

quarantine line, their loss in value in the Northern markets because of the presence of the tick is \$22,500,000. There are numerous other losses, such as decrease in milk production, deaths in pure-bred cattle brought into the South, deaths of non-immune Southern animals and others, making a grand total loss, according to one writer, of over \$40,000,000 annually to the country east and west of the Mississippi River south of the quarantine line.

It is on account of this enormous loss and the fact that cattle production in the South should be encouraged, that it has been determined to eradicate the cow tick. That this is practicable, has been shown in several States. In Virginia and in North Carolina, several counties have been freed of the tick and have therefore been placed above the quarantine line. What has been done in this line on a single farm, or in a county, can be done in a whole State or in every infested era.

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most progressive stockmen know now that they should raise their animals ticky; otherwise when they are sold within the State, they succumb to tick fever on the infested farm of the buyer. When Florida gets more generally into the improved and pure-bred cattle business and the States north of us eradicate their ticks, there would be every reason for Florida to try to get into the great cattle markets with her beef cattle and then to eradicate the tick. Again, should Cuba begin tick eradication, she would probably declare a quarantine against Florida cattle, on account of their being ticky. This action would force Florida to eradicate her ticks. There is no question that, like other Southern States, the Florida cattle industry is kept down by the tick. This parasite is largely responsible for the scrubby, inbred animal seen on every hand. Improved Northern breeds brought into Florida, as a general thing, die in such numbers that, in the long run, the business is unprofitable, for the masses. There are at present, many fine cattle in the State, but they are in the hands of the few, and the masses have not yet reaped the benefit of their presence. The poor man cannot afford to take the chances of importing fine animals under such a terrible handicap.

If it were not for the fact that Florida still has a fairly good market for the scrub, ticky cattle, in Cuba, there would be every reason for her to enact suitable laws and invite the co-operation of the Federal Government in eradicating the tick; so that, summing up all the evidence for and against tick eradication, it would seem that tick eradication would be against Florida's interests at present. When the Cuban market closes, or when Cuba raises cattle enough to supply her domestic demands, Florida will have to seek another market. She cannot enter the Northern markets with her inferior animals, with profit. She will be forced to produce a good class of animals. She can best do this by grading up the present stock, raising more feedstuffs to help out the winter pastures and by the eradication of the tick.

Vital
Statistics.

It has been the custom in previous annual reports to give figures which supposedly represented the life movement of the State in occurrence of births and deaths of each year, and to deduce therefrom a ratio of increase or of decrease by natural means, per 1000 of

the State's population. While it has never been claimed that these figures were absolutely reliable and accurate statements, yet it was thought that they were approximately so, and were tabulated with no intention to deceive or mislead. However, after studying the subject very carefully for several years, and making comparisons with similar reports of other States and cities, where registration of births and deaths seem to have been more diligently reported and more accurately kept, the conclusion has been forced upon the Executive Office that the statements or tabulations of former years have not represented a truthful exhibit of the actual ratio of either mortality or of births, and to further publish the meager reports which the Board receives will be merely an effort to make ourselves believe in a state of affairs statistically which does not exist. Many attempts have been made in the past to simplify the collection of vital statistics in Florida, and yet keep within the requirements of the statute, which *demands* that all births and deaths occurring in Florida shall be reported to the State Board of Health by practicing physicians, heads of families, heads of institutions, and others having knowledge of the same, but each and every effort in this direction has seemingly failed, notwithstanding that the Executive Office has tried to adopt a system used by the Census Bureau of the United States, and the State Board of Health has offered as an inducement to offset the objection of personal expense in making these returns, a slight remuneration. The amount offered is small, it is true, but yet it is sufficient to defray any cost of stationery and postage which might be incurred. Again, in the large majority of instances, blank stationery and addressed envelopes have been supplied by the Board for this purpose. The last attempt made by the State Board of Health to formulate a method or system for collecting vital statistics of the State, which might be reliable, is prescribed by Rule One of the Board, by appointment of County Registrars and Sub-Registrars, which it was thought at the time of adoption promised a hope of obtaining not only better returns, more prompt in their making, but also a more accurate compilation of all births and deaths as they occurred yearly in the State. The plan was submitted to the criticism of the Census Bureau at Washington, and met with approval. The form

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of blanks to be used was that devised by this Bureau for uniform obtaining of these returns and adopted by the State Board of Health as Rule One of the Board. Again has disappointment in this particular met the efforts of the Executive Office, for, after a trial of the method, it is found that the majority of Sub-Registrars, appointed by the County Registrars, objected after a time to making reports through the County Registrars, assigning as a reason the failure of the County Registrars to remunerate them for this service; those Sub-Registrars or individual physicians who were inclined to obey the requirement of the statute, reported directly to the office of the Board; thus complicating matters of settlement with the Executive Office. Many of the Registrars claimed the total amount for reports sent in whether gathered or collected by them or not, and Sub-Registrars and individual physicians making a similar claim, tended to a confusion and irritation which was annoying and undesirable.

Temporary
suspension
of Rule 14.

On consultation with the President of the State Board of Health, it was decided that to longer continue payment for service which was so unsatisfactory and so misleading in the character of data obtained and so lacking in actual numbers as regards the vital movements of the State, would be only a wasteful expenditure of State funds, to avoid which the Executive Officer has always tried; therefore, early in June, the State Health Officer obtained permission from the President of the State Board of Health to temporarily suspend that portion of Rule Fourteen (14) of the State Board of Health which provides for payment for these returns, until the next annual meeting of the Board, and addressed the following letter to the Registrars, Sub-Registrars and physicians of the State:

"Jacksonville, Fla., July 1, 1906.

"Suspension of Rule 14.

"To All Registrars and Sub-Registrars of Vital Statistics of the State Board of Health of Florida:

"Dear Doctor and Others:

"The discouraging character both in number and rendition of vital statistic returns received at the office of the State Board of Health for several years past, and which, notwithstanding a constant pleading on the part

of the State Health Officer, to the physicians of Florida, for better and more prompt and more accurate reports, has been ignored in the majority of instances and treated with indifference, has led to a suggestion and recommendation to the President of the State Board of Health for a suspension of Rule 14 of the State Board of Health which provides for a payment of ten cents for each and every birth and death reported to the office of the State Board of Health, during the year. If the State Board of Health cannot obtain a reasonably sure proportion of statistics of this character, any statement based upon a partial computation is misleading and deceptive and untruthful as representing the life movement of the State's population.

A State statute requires the physicians of the State and others having charge of State institutions, as well as Coroners, to make returns of every death and every birth coming under their control or observation and occurring in Florida, to the State Board of Health. The State Board of Health has no legal right nor does it propose to advise such that the moral and legal responsibility imposed by the State statute shall be suspended or abrogated, but as there has been no general co-operation in this work given by the medical profession to the State Board of Health, it is thought that any further payment for partial returns had better be discontinued, and this suggestion, which meets with the approval of the President of the State Board of Health, *will go into force* to date from the end of the fiscal year ending June 30th, 1906.

"Be it clearly understood that failure to report births and deaths is as distinctly a violation of law as it has been in the past.

Very truly,

"JOSEPH Y. PORTER,

"Executive Officer State Board of Health."

This letter with a concise and condensed statement of facts, which subsequently appeared in the Health Notes and is herewith repeated, explains quite clearly the motive and reason for recommending the suspension of the Rule.

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(From Florida Health Notes, August, 1906.)

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ing together of occurrences or happenings into groups, from which compilation useful information can be deduced by study and reasoning, but that facts of whatsoever character grouped together or singly may have any significance, they must be truthful and accurate. It is not true that "figures never lie." Two and two make four—that is true; but unless one is positive that it is only two and two which is represented in the statement and possibly not ten and ten, while not a lie directly stated, yet two and two does not accurately represent a fact upon the reliability of which a statement representing certain statistics which is being discussed, must depend.

"This assertion may be accepted as true for statistics of every kind. If a collection of occurrences in manufacture, arts, science, and business of every and whatsoever description does not accurately represent the facts which are claimed, they are worthless, misleading and deceptive.

"The Health Notes premises its remarks on Vital Statistics by the above homily because the Vital (life) Statistics which are now being made to the State Board of Health are absolutely worthless, because misleading. The births and deaths occurring in the State are not reported to the Board as the State statute directs and as the Rules and Regulations of the State Board of Health on this subject require.

"Why, it may be asked, 'do not the physicians of Florida comply with the law in this respect?' The answer may be given: Indifference to the importance of the subject; carelessness in some instances; contumacy of the law and the requirements of the State Board of Health, and pertinacious opposition in many cases. This latter reply is not too harsh a statement of facts because in a courteous inquiry made in regard to certain facts omitted in a certificate of birth or death which the Census Bureau of the United States sets forth in a uniform requirement on its blank to be answered, the State Health Officer has been told: 'If you want the genealogy of the family, you had better come yourself or send some one down and get it.'

"For seventeen years the State Health Officer has pleaded with the physicians of the State of Florida for better reports of births and deaths occurring in their practice.

He has obtained permission from the State Board of Health to supply blanks and postal cards, to be freely distributed for this purpose, and he has gone a step further and gotten additional permission to pay ten cents for each birth and death reported. But importuning and pleading has availed nothing, and it is sad to relate, but it is truthful nevertheless, that among the profession living within the confines of the cities, the patriotic spirit of State pride in Florida's healthfulness and peculiar adaptability for relief or cure of certain diseases is not up to the standard of ideal citizenship, else each would vie with the other in furnishing the State Board of Health with the name and record of every birth and death occurring in his or her practice or under observation, that the State Board might thus truthfully say to the public: 'These figures accurately represent the life movement of the State in total and separately for certain diseases.'

"It has been argued that the State Board of Health has been told by some doctors 'This is a fad,' and 'there is no useful result to be had from putting me to this trouble.' It matters not what individual opinion on the subject may be, it is the law of the State that these reports shall be made to the State Board of Health, and as good citizens having due respect for the law, it is the duty of every doctor practicing medicine in Florida to comply with the requirements. Again, there is more than a moral obligation of good citizenship which demands of every physician that he or she shall report such Vital Statistics as occur in his or her practice. A sense of gratitude should suggest such a course if legal duty does not impel it. The State of Florida through its Legislature has removed the yearly license tax on physicians. Is it too much for the State to ask in return for this concession that each doctor devote a few minutes every month to mailing to the State Board of Health reports of births and deaths which have occurred in his or her practice during the past month, especially when blanks are furnished for this purpose?

"The State Health Officer, with other physicians of the State of Florida, who observe the Vital Statistical Law, were instrumental in persuading the lawmakers of the State to omit any license tax on the medical profession, and he with others of his associates in the work are dis-

appointed to find that the country members of their profession are unappreciative of their efforts. They are evidently willing to accept all and everything of a personal benefit, but are unwilling and refuse to be public-spirited even to giving monthly a few moments of their time.

"It may be that the Legislature next year will consider its generosity misplaced and may replace the license tax—who knows? If it does, where will the blame lie?"

"J. Y. P."

There is but one way out of this dilemma, and the fact cannot be controverted, but that if Florida is ever to be included in the number of registration States of Vital Statistics of the United States, every practicing physician of the State must show more patriotism than they, as a class, have shown lately in this regard, and must comply strictly with the statute, and, together with heads of families where there has been no medical attendant, and heads of institutions, promptly report to the Board the occurrence of every birth and death in their practice or coming under their observation or knowledge.

It has been suggested that the number of deaths taking place in the State, and the causes of the same, might be obtained if an enactment prohibited the burial of any person without a certificate of death from an attending physician, and making it the duty of the undertaker or person supervising the burial of the deceased, to transmit this report promptly to the office of the State Board of Health. There are difficulties in the way of acquiring this information which on first consideration are not apparent, but on a more careful thought of the subject will be appreciated. Such a rule could not be easily enforced, because Florida being as yet a sparsely settled State, many deaths occur in the country districts remote from large settlements, where burials are made on private premises, and not by regular undertakers. While the heads of families might be perfectly willing to furnish the State Board of Health with information of this kind, when asked for it, still the Board would be without the knowledge of a death occurring under such circumstances, which would be an obstacle in the way of perfect returns, and neither could be anticipated nor prevented.

In view, therefore, of what has been said, and for the reasons given, it is recommended that until the Board has assurance that the statute respecting Vital Statistics will be more generally observed in the future, and more accurate data in this regard is received by the Board than has been given by the physicians of Florida in the past, Rule Fourteen (14) be repealed, which rule applies to the payment for this service to the State. The Board has no authority nor is it recommended that the State law requiring a report to be made of the births and deaths in this State shall be repealed, although so far in a great measure it is a dormant measure on the statute books of the State. The State Health Officer has so frequently alluded to the importance of this subject in former reports, and has gone so minutely into the discussion of the subject then, that it is not thought to be now necessary to argue the point at any greater length, as additional information in support of the argument can be had by reference to former reports of the Executive Officer.

Permanent
repeal of
Rule 14 rec-
ommended

The Bacteriological Laboratory of the Board continues to receive the confidence of the physicians of the State and to command respect for its findings when specimens of disease growths are submitted for examination. The amount of work done is shown by the following report of the Acting Director, and gives promise for increased usefulness in this direction. It is safe to say from expressions of commendation heard, that the institution is appreciated both by the medical profession of the State as well as by the public generally.

Labora-
tory,

In the death of Dr. Eduardo Andrade, the Laboratory lost an earnest worker and an accomplished scholar. The institution was his pride, and it was his aim to promote its welfare and enlarge its scope of work, especially in original research in bacteriological fields, until it should be well and favorably known and its influence recognized throughout the country. As the year closes, there has not been a selection made to fill the position made vacant by the death of Dr. Andrade, although the names of several students in this especial branch of medical science are under consideration for appointment. Since July first the Laboratory has been in charge of Dr. Holloway, the assistant to Dr. Andrade, who has performed the

duties of the office very creditably, and it is hoped, satisfactorily to the public.

The usefulness of this division of the Health Supervision of the State can be greatly increased in the way of convenient administration, if a suitable building or even office room could be secured whereby many facilities could be had which would materially aid in the prosecution of the work of the Laboratory; such as more space, better light, and a more suitable arrangement for experiments of vivisection. It has been the hope for many years that well-wishers of the Board might be induced to erect a building, especially appropriate for the State Board of Health offices and Laboratory. The Board can well guarantee a 6 per cent interest on an investment of \$15,000 for this purpose, which it is thought would amply represent the cost of construction of a building such as is desired.*

HOWARD S. HOLLOWAY, M. D.,

Acting Bacteriologist.

*Dr. Joseph Y. Porter,
State Health Officer,
Jacksonville, Fla.*

Report of
the Lab-
oratory.

Dear Doctor:

It is with pleasure that I submit the following report covering the work accomplished in the Bacteriological Laboratory of the State Board of Health, during the year 1906.

*Since writing the above, the Board has secured the services of Dr. J. J. Kinyoun as Bacteriologist, who, although not promising to remain permanently, will, it is thought, stay sufficiently long in charge of the Laboratory, and until at least the Board can secure the assistance in this direction which it is looking for. Dr. Kinyoun needs no introduction to the medical profession of Florida, for, as former director of the Laboratory of the Public Health and Marine Hospital Service at Washington, and lately in charge of Mulford's Laboratories, near Philadelphia, his fame as a bacteriologist is of international repute, and is, therefore, well known.

This year has been an exceedingly busy one. Many physicians of the State who have hitherto failed to avail themselves of the aid furnished by this department of the State Board of Health, have at last joined our ranks. To all members of medical organizations who have withheld their patronage in the past, the Laboratory extends a very cordial and urgent invitation to become identified with its work and receive what scientific benefit it is prepared to bestow.

The illness of the distinguished scientist and expert bacteriologist, Dr. Eduardo Andrade, in the early summer, and his very grievous, unfortunate and untimely demise in the early fall of 1906, necessarily transferred to a very considerable extent the entire work and responsibility of this department, to the Assistant Bacteriologist, who, by virtue of the very able assistance rendered by Dr. Joseph Y. Porter, State Health Officer, and Dr. Hiram Byrd, First Assistant to the State Health Officer, has endeavored to maintain the high degree of efficiency inaugurated at the inception of this department.

The character of the work done during the year has suffered no material alteration from that of preceding years, the major portion of the time having been devoted to the examination of sputum, blood, throat exudates, feces, urine, pus, pathological tissues, etc.

The few changes in technique may be stated briefly as follows:

In the greater number of bacteriological laboratories, it has been customary to place a few cubic centimeters of a five per cent. carbolic acid solution in the bottles designed for the collection of sputum. This has proved objectionable for the reason that the heavy coagulum resulting from the mixture of a highly albuminous and mucoid sputum with carbolic acid, prevents a thorough disinfection. For the carbolic solution we have substituted a 5 per cent. lysol solution, which, while emulsifying the sputum, has no effect upon the waxy substance contained in the tubercle bacillus, upon which waxy substance the identification of this bacillus depends when staining.

The rule of examining several (at least three) slides of each specimen of sputum suspected of tuberculosis before calling it negative, has been very strongly adhered to and many instances may be cited where the tubercle

bacillus was not found in the first and second examinations, but appeared in a clump of two or more in the third or fourth. The finding of one tubercle bacillus in the course of examination of a specimen of sputum is sufficient to establish a diagnosis of tuberculosis. One can readily understand how essential is the routine observance of this rule in determining the existence of pulmonary tuberculosis in the very early stage when one takes into consideration the noteworthy fact that physicians as a rule do not submit subsequent specimens for examination where an examination of the first proves negative.

During the year several specimens of sputum have been found to contain bacilli which very closely resemble tubercle bacilli in their morphologic and staining characteristics, but differing from the latter in growing quite readily and profusely on artificial media, in producing a salmon pigment, is sporogenic, and decolorizes with alcohol. The patients in whose sputa this organism was found presented a number of the characteristic symptoms and signs of tuberculosis; viz., emaciation, pallor, severe bronchial disturbance, loss of appetite, and an abundant expectoration. At the expiration of several months these symptoms and signs disappeared, and an examination of the sputa at this time did not show the presence of this peculiar bacillus. This bacillus has been isolated in pure culture, but so far its pathogenicity has not been determined.

We have continued the use of the living and dead typhoid cultures in the examination of blood serum for the Widal reaction, and still find the dead culture (prepared with formalin 1 cc. to 100 cc. of a 24-hour typhoid culture) as equally sensitive as the living one. A number of specimens of blood submitted from patients presenting symptoms of paracolon infection were examined with negative results in each case.

In this connection I wish to add one point which has enabled me to differentiate a positive from a negative Widal reaction in cases on the border line, so to speak. If the reaction be positive, clumping of the typhoid bacilli will become more perfect and pronounced the longer you observe it after the one hour limit, whereas if it be negative these clumps which have formed during the one hour limit, will break up and disappear after this limit. The observance of this simple point in doubtful cases has en-

abled me in many instances to differentiate a positive from a negative reaction.

During the year record has carefully been taken of the different types of diphtheria bacilli occurring in cultures made from the swabs submitted to the Laboratory. The prevailing type (after Wesbrook) has been C', and next in order have been types C-D-E, A-D'-E'-F. The diphtheria bacilli of this section of the country are, for the most part, of the large variety.

In this connection it is gratifying to state that the physicians of Jacksonville, Pensacola, and other districts of the State have been quite active in submitting release cultures from the throats of patients suffering with diphtheria, thus relying entirely upon the report of the Laboratory in releasing them from quarantine. What threatened to be an epidemic of diphtheria in Jacksonville during the past fall, was aborted to a large extent by the observance of the simple but safe rule of having release cultures made repeatedly, if necessary; and abiding by the report of the Laboratory.

With a full knowledge of the great number of cases of ancylostomiasis (hook-worm disease) in this State, it is rather surprising to note the comparatively few specimens of feces submitted during the past year. Either the physicians of the State are not yet fully aware of the destruction this disease is working in their midst or they are treating every suspicious case of anaemia with thymol thus verifying the existence or non-existence of the disease for themselves.

This disease is entirely too prevalent in all the country districts and small towns, and is doubtless responsible by its proneness to lower the vital resistance of the human body, for the existence of many of the more formidable diseases, tuberculosis, typhoid fever, pernicious malarial fevers, etc. With a full knowledge of the widespread prevalence of this disease, the Laboratory recommends that the State Board of Health print and issue to each physician of the State circulars containing a full and comprehensive description of the disease with such treatment as has proved most successful in the hands of those who have had the most to do with its treatment.

The Laboratory has examined 378 specimens of urine during the year. Of this number no fewer than fifty were submitted for the determination of the presence of the

tubercle bacilli, several for the presence of the filaria sanguinis hominis, and the remainder for castes, pus cells, etc.

The number of specimens of urethral pus examined for gonococci comprised 197.

Hydro-
phobia.

In the early summer of the year, an epidemic of hydrophobia became evident among the canine family of Jacksonville and vicinity, although it is believed the existence of said epidemic was not fully confirmed until a member of the human family who was bitten by a rabid dog contracted the disease and died. Almost immediately following the confirmation of the existence of rabies, the Laboratory was called upon to examine the brains of all dogs, cats, etc., suspected of having rabies.

The brilliant discovery by Professor Negri, of Italy, in 1903 relative to the occurrence of certain easily stained bodies in the large cells of the Hippocampus major or Ammon's horn (that part of the brain substance which juts up into the floor of the lateral ventricle of the cerebral hemisphere), Purkinje cells of the cerebellum, and in the cells of the Gasserian ganglion, has so simplified the method previously employed in determining the existence of rabies that any well equipped laboratory can furnish a report in a short space of time—24 hours.

Prior to the discovery, one had to remove the entire brain of the animal suspected of rabies, make it into an emulsion, using sterile normal salt solution, inject a certain quantity into the brain of another animal free from the disease, and wait ten, fourteen or twenty-one days to ascertain whether the animal thus injected died with the characteristic signs of the disease. When one recalls the fact that rabies not infrequently manifests itself in man on the tenth day following the infliction of the bite of a rabid animal, the vast importance of Professor Negri's discovery may be clearly appreciated.

The technique for the determination of the "Negri bodies" is as follows: (1) Dissect out the Ammon's horn and, cutting with scissors at right angles to its length, divide it into small disks as desired; (2), press a thoroughly cleansed slide upon the disk and remove it suddenly, or lifting the disk with forceps, press upon the slide. Four or more impressions may thus be made from one disk. Before the impressions have thoroughly dried, place in (3) Zenker's fluid one-half to two hours; (4), wash in water; (5), 95 per cent alcohol 5 to 10 minutes;

(6), saturated alcoholic solution of iodine 5 to 10 minutes; (7), wash out iodine in 95 per cent alcohol; (8) wash in water; (9) stain for fifteen minutes in saturated alcoholic solution of losin; (10), counterstain three to five minutes with Leiffler's alkaline methylene blue; (11) differentiate in 95 per cent alcohol. Impressions treated in this manner show the nucleolus of the nerve cells stained dark blue, cell-body and nucleolus pale blue, red blood corpuscles brilliant pink, and Negri bodies which may be extra-cellular, a peculiar purple pink, often with colorless or blue internal markings; of various shapes and sizes. Where the bodies are not shown up in impressions treated in the foregoing manner, the following technique for the tissue is recommended: (1) Small pieces of cerebellum, Ammon's horn and Gasserian ganglion in Zenker's fluid for four hours; (2), 95 per cent alcohol for several hours; (3) absolute alcohol one-half hour; (4) chloroform 20 minutes to one-half hour; (5) chloroform and paraffine saturated solution warm; twenty minutes to one-half hour; (6) paraffine at 55 degrees C., one-half hour; (7), imbed; (8), cut with Minot microtome; (9), float sections on water at about 40 degrees C.; and fix on slide with glycerine albumen; (10), one-half hour at 55 degrees C.; (11), remove paraffine with kylol; (12), absolute alcohol; (13), 95 per cent alcohol; (14), saturated alcohol solution of iodine 5 to 10 minutes; (15), wash out iodine in 95 per cent alcohol; (16), wash in water; (17), stain 15 to 30 minutes in equal parts of Unna's stain* and 5 per cent aqueous losin (Grubler's w. g.); (18), wash in water; (19), Unna's stain 3 to 5 minutes; (20), wash in water; (21), differentiate in 95 per cent alcohol; (22), absolute alcohol; (23), kylol; (24), balsam.

The bodies also stain well with Mallory's Iron Hematoxylin. Frothingham summarizes his conclusions, drawn from his study of Negri bodies, thus:

1. The presence of Negri bodies is diagnostic for rabies, and, if found, animal inoculation is unnecessary.
2. The Ammon's horn is the most likely place to find

*Unna's stain is made as follows: Unna's blue (stock): methylene blue (Grubler's), one part potassium carbonate, one part; water, one hundred parts. Unna's stain: Unna's blue, one part; water, four parts.

Negri bodies. If not found in impression preparations of Ammon's horn, they must be sought for in section.

3. If not found in impressions or sections of Ammon's horn, or cerebellum, the Gasserian ganglion must be examined for pathological changes.
4. If lesions are found in the Gasserian ganglion, there is grave suspicion of rabies, but animal inoculation must be resorted to to establish the fact.
5. If no Negri bodies can be found, and there are no lesions in the Gasserian ganglion, a negative report may be made; but if persons have been bitten, animal inoculations are advisable to allay apprehension.

Of the ten brains examined in the Laboratory during the past year, six showed Negri bodies. Not one of the patients who protected himself against the disease by the Pasteur treatment developed hydrophobia.

During the year twenty specimens of milk were submitted for the determination of preservatives and harmful bacteria. Of this number only one showed the presence of a preservative substance, formalin. In each specimen examined for harmful bacteria, the bacterial count ran well into the millions per each cubic centimeter. The standard bacterial count adopted by the large cities permits 50,000 bacteria per each cubic centimeter of milk.

Specimens of water collected from faucets in various sections of Jacksonville during the summer months when typhoid fever was most prevalent, failed to show the presence of any contaminating substance. The average number of bacteria per each cubic centimeter was 625. The average amount of chlorine per each 100,000 parts of water was 0.02. The organism, *bacillus coli communis*, found wherever human excreta contamination exists, was not isolated in either sample.

The existence of a number of cases of typhoid fever in the vicinity of Fernandina during the month of June, 1906, resulted in the inauguration of an effort of the County Health Agent to locate the source of infection. At first, several samples of drinking water, including faucet and mineral water, were submitted to the Laboratory and examined with a negative result. Finally, the oyster beds were suspected of being responsible for this outbreak of

fever, and accordingly, samples of oysters from several different beds situated in a shallow stream were submitted. In the meantime, the County Agent was informed of the existence of fever among the people residing along the upper banks of this stream, and investigation not only confirmed the authenticity of the report, but also revealed the existence of open privies into which the excreta from these fever patients was daily thrown. From each sample of oysters received for examination, the *bacillus coli communis* was isolated in almost pure culture, the contaminating organism being the streptococcus. In all, I believe, six or eight patients who had eaten oysters from the infected beds developed typhoid fever. Not one case developed after the residents were apprised of the oyster beds being the source of infection.

To Fritz Schaudinn, Germany, is due the honor of having first discovered the causal agent of syphilis, the "*spirocheta pallida*" or "*treponema pallidum*," as he preferred to have it called. Following this discovery the Laboratory has received a number of specimens submitted by physicians of the State to be examined for the *spirocheta pallida*. Of the number submitted, six showed the presence of this organism, while the remainder proved negative. In view of this very recent discovery, a short description of this organism may be properly incorporated in this report. It varies in length from four to fourteen micra in width, from an immeasurable thickness to five-tenths of a micron, and the number of bends or curves from three to twelve. It is motile, showing a rotary motion, forward and backward; and a bending of the entire body. It is extremely difficult to see in the fresh state but shows up quite distinctly in stained preparations. The ends present a distinctly sharpened appearance, and this feature serves to differentiate it from saprophytic spiracheta which are frequently found in the throat and in almost any variety of ulceration. The *spirocheta pallida* has never been found in any lesion except that accompanying syphilis. It cannot thus far be grown on artificial media.

In preparing specimens from syphilitic lesions for the determination of the *spirocheta pallida*, the following technique is recommended. If the lesion be a chancre: With some absorbent cotton wipe off the surface and

press a glass slide firmly against the freshened surface. When the chancre is not painful, its surface may be curetted, and the material thus obtained may be smeared thinly on a glass slide by means of a platinum wire. Where the lesion is a mucous patch: Curette the surface thoroughly, until serum exudes, and then press a clean slide against the surface. In either case allow the smear to dry in the air. For staining the spirocheta pallida, Hoffman and Schaudinn recommend azur-eosin (Giemsa), prepared according to the following formula: Azur No. 1, 1:1000; Azur No. 2, 8:1000; eosin (Grubler), 2.5 of one per cent dissolved in 500 cc. of water. The staining mixture should be made up fresh as desired and for this purpose 12 cc. of the eosin solution are mixed with 3 cc. each of Azur No. 1 and No. 2.

The material to be examined is spread upon a clean slide; fixed with absolute alcohol for 10 to 20 minutes, and the stain applied for 16 to 24 hours; it is then washed thoroughly in water, dried in the air and mounted in balsam. Another excellent stain for this purpose is Goldhorn's spirocheta stain, which is applied for two to five minutes, washed off and the preparation allowed to dry in the air. Examine with one-half oil immersion lens.

The following substances have been examined and their germicidal action determined by the Laboratory:

1. Glycothymoline in solution of one to one, did not kill the test bacteria after twenty-four hours' exposure. Germicidal action nil.
2. Listerine in solution of one to one killed the test bacteria after one minute's exposure. Germicidal action quite potent.
3. Boracic acid in saturated alcohol did not kill the test bacteria after twenty-four hours' exposure. Germicidal action nil.
4. Carbolic acid in solution of one to one hundred, killed the test bacteria after one minute's exposure. Solutions of this drug weaker than the foregoing did not kill the bacillus coli communis or bacillus paracolon after one minute's exposure. Germicidal action in solutions one to one hundred or stronger very potent.
5. Formalin in solution of one to one hundred or one per cent, did not kill the test bacteria after one minute's exposure. In strength of five per cent the bacteria failed

to grow after one minute's exposure. Germicidal action of formalin powerful in strength of five per cent or over.

6. Mercuric cyanide in solution of one to five thousand killed the test bacteria after one minute's exposure. Germicidal action powerful.

7. Lysol in solution of one to one hundred, or one per cent, killed the test bacteria after one minute's exposure. Germicidal action powerful in solution of one to one hundred or stronger.

8. Potassium permanganate in solution one to five hundred failed to kill the test bacteria after one and one-half hours' exposure. Germicidal action very weak.

9. Ethyl alcohol in solution one to thirty killed the test bacteria after one minute's exposure. In weaker solutions (20 or 25 per cent), the bacillus coli communis and bacillus paracolon were not killed after one hour's exposure. Germicidal action powerful in solution of thirty per cent or stronger.

10. Methyl alcohol, in solution one to thirty, killed the test bacteria after one minute's exposure. In weaker solutions the bacillus coli communis was not killed in one hour's exposure. Germicidal action powerful in solution of thirty per cent or stronger.

11. Platt's chlorides in solution one to four failed to kill the bacillus coli communis and bacillus typhosus after forty minutes' exposure. Germicidal action nil.

12. Acetozone in solution one to 400 failed to kill the test bacteria after twenty-three hours' exposure. In solution one to one hundred (one per cent), the bacillus coli communis remained viable after one hour's exposure. Germicidal action very weak.

13. Alphezone in solution one to 1,200 killed the test bacteria in one hour's exposure. Germicidal action potent in very strong solution.

14. Hydrogen peroxide in solution one to eight killed the test bacteria after one minute's exposure. Germicidal action potent.

The test bacteria in the above included:

Bacillus typhosus; bacillus coli communis; bacillus paracolon (strong); staphylococcus pyogenes aureus, albus and citreus.

Respectfully submitted,

HOWARD S. HOLLOWAY,
Acting Bacteriologist.

TABLE NO. 1.

Showing the number of specimens examined in the Laboratory during each month:

January.	261
February.	223
March.	263
April.	255
May.	254
June.	227
July.	228
August.	231
September.	198
October.	187
November.	204
December.	271
Total.	2,802

TABLE NO. 2.

Tubercu-
losis

Showing the number of specimens of suspected tuberculosis, whether positive or negative, which have been examined during each month:

	Positive.	Negative.	Total.
January.	26	52	78
February.	26	55	81
March.	33	58	91
April.	19	71	90
May.	30	44	74
June.	25	43	68
July.	18	43	61
August.	17	45	62
September.	20	27	47
October.	22	25	47
November.	28	38	66
December.	19	58	75
Total.	283	559	842

TABLE NO. 3.

Showing the number of specimens of suspected tuberculosis, whether positive or negative, which have been examined for each city:

	Positive.	Negative.	Total.
Jacksonville.	116	242	358
Tampa.	72	155	217
Chattahoochee.	1	3	4
Daytona.	15	23	38
St. Petersburg.	1	2	3
Key West.	5	8	13
DeFuniak Springs.	0	1	1
Webster.	1	1	2
Punta Gorda.	2	0	2
Ocala.	11	22	33
Williston.	1	1	2
Gainesville.	6	11	17
Kissimmee.	0	2	2
Lake City.	2	1	3
Sanford.	3	2	5
Lakeland.	3	14	17
Tallahassee.	6	11	17
Fort Myers.	2	0	2
Pinetta.	0	2	2
Plant City.	1	0	1
Chipley.	1	4	5
Archer.	1	1	2
Titusville.	1	0	1
Bartow.	4	1	5
Welborn.	2	3	5
Green Cove Springs.	0	3	3
Fort Pierce.	1	0	1
Welaka.	0	1	1
Macclenny.	0	1	1
Dunnellon.	1	2	3
Miami.	1	1	2
Starke.	1	1	2
Anthony.	0	1	1
Fernandina.	0	1	1
Delroy.	2	2	4
Orlando.	2	2	4
White Springs.	0	2	2
Crystal River.	1	2	3

Tubercu-
losis

TABLE NO. 3.—Continued.

	Positive.	Negative.	Total.
Live Oak.	4	0	4
Bradentown.	2	3	5
Apalachicola.	2	4	6
Wildwood.	0	2	2
Fort Meade.	3	10	13
Nocatee.	0	2	2
Floral City.	3	0	3
Lloyd.	0	1	1
Quincy.	0	1	1
Myrtle.	1	0	1
Bayard.	1	0	1
Palmetto.	0	5	5
LaCrosse.	0	1	1
Freeport.	1	0	1
Pensacola.	0	1	1
Total.	283	559	842

TABLE NO. 4

Typhoid
fever

Showing the number of specimens of suspected typhoid fever, whether positive or negative, which have been examined during each month:

	Positive.	Negative.	Total.
January.	14	12	26
February.	9	17	26
March.	17	34	51
April.	18	35	53
May.	16	46	62
June.	18	52	70
July.	19	55	74
August.	12	52	64
September.	20	45	65
October.	15	32	47
November.	13	28	41
December.	20	25	45
Total.	191	433	624

TABLE NO. 5.

Showing the number of specimens of suspected typhoid fever, whether positive or negative, which have been examined from each city:

	Positive.	Negative.	Total.
Jacksonville.	74	214	288
Arcadia.	2	7	9
Daytona.	5	11	16
Tampa.	38	86	124
Kissimmee.	0	3	3
Quincy.	0	1	1
River Junction.	0	1	1
Cocoa.	2	4	6
St. Petersburg.	7	15	22
Safety Harbor.	0	1	1
Dunnellon.	5	4	9
Lake Butler.	3	4	7
Myrtle.	1	0	1
Apalachicola.	1	4	5
Ocala.	5	8	13
Gainesville.	1	0	1
St. Augustine.	2	3	5
Lloyd.	0	3	3
DeLand.	0	1	1
Tallahassee.	9	14	23
Key West.	2	1	3
Fernandina.	5	8	13
Fort Pierce.	2	3	5
Freeport.	0	1	1
Newberry.	3	2	5
Plant City.	11	8	19
Chattahoochee.	2	2	4
Bradentown.	1	2	3
Lakeland.	1	3	4
Chipley.	1	1	2
Stuart.	1	0	1
Ewington.	0	1	1
Citra.	2	3	5
Starke.	0	1	1
O'Briens.	1	0	1
Bayard.	0	1	1
Monticello.	0	2	2

TABLE NO. 5—Continued.

	Positive.	Negative.	Total.
New Smyrna.	0	1	1
Macclenny.	0	1	1
Mascotte.	2	0	2
Live Oak.	0	1	1
Clearwater.	0	1	1
Mayport.	0	1	1
Miami.	1	0	1
Mulberry.	1	5	6
Total.	191	433	624

TABLE NO. 6.

Showing the number of specimens of suspected diphtheria, whether positive or negative, which have been examined during each month:

	Positive.	Negative.	Total.
January.	20	27	47
February.	6	21	27
March.	10	29	39
April.	11	16	27
May.	7	21	28
June.	1	5	6
July.	0	3	3
August.	7	12	19
September.	5	11	16
October.	14	11	25
November.	25	25	50
December.	25	53	78
Total.	131	234	365

TABLE NO 7.

Showing the number of specimens of suspected diphtheria, whether positive or negative, which have been examined from each city:

	Positive.	Negative.	Total.
Jacksonville.	60	126	186
Tampa.	43	57	100
Fernandina.	4	3	7
Pensacola.	2	9	11
Plant City.	1	0	1
St. Augustine.	3	9	12
St. Petersburg.	2	4	6
Miami.	3	0	3
Ocala.	1	3	4
Tallahassee.	4	8	12
Milton.	0	1	1
Mayport.	2	6	8
Key West.	0	1	1
Manatee.	2	3	5
Bradentown.	3	3	6
Bushnell.	0	1	1
Apalachicola.	1	0	1
Total.	131	234	365

TABLE NO. 8.

Showing the number of specimens of suspected malaria, whether positive or negative, which have been examined during each month:

	Positive.	Negative.	Total.
January.	0	5	5
February.	0	9	9
March.	0	17	17
April.	1	18	19
May.	0	15	15
June.	1	19	20
July.	1	17	18
August.	1	18	19
September.	2	14	16
October.	5	11	16
November.	2	15	17
December.	2	20	22
Total	15	178	193

TABLE NO. 9.

Showing the number of specimens of suspected malaria, whether positive or negative, which have been examined from each city:

	Positive.	Negative.	Total.
Cocoa.	0	3	3
Tampa.	4	43	47
Jacksonville.	6	86	92
St. Petersburg.	0	1	1
Starke.	0	1	1
Ocala.	0	1	1
Gainesville.	0	2	2
Fernandina.	1	3	4
Live Oak.	0	1	1
Arcadia.	0	5	5
Tallahassee.	0	3	3
Plant City.	0	2	2
Citra.	1	7	8
Jasper.	0	1	1
Lakeland.	0	1	1
Key West.	0	4	4
Quincy.	0	2	2
Fort Pierce.	1	1	2
Kissimmee.	0	1	1
Apalachicola.	0	1	1
Daytona.	1	4	5
Monticello.	0	1	1
Miami.	1	0	1
Green Cove Springs.	0	1	1
Mayport.	0	1	1
Melbourne.	0	2	2
Total.	15	178	193

TABLE NO. 10.

Showing the number of microscopical examinations of urine made during each month:

January.	72
February.	37
March.	43
April.	31
May.	33
June.	47
July.	19
August.	18
September.	17
October.	29
November.	9
December.	23
Total.	378

TABLE NO. 11.

Showing the number of specimens of suspected gonorrhea, whether positive or negative, which have been examined during each month:

	Positive.	Negative.	Total.
January.	6	13	19
February.	10	15	25
March.	3	6	9
April.	9	4	13
May.	7	16	23
June.	3	4	7
July.	11	16	27
August.	6	16	22
September.	5	8	13
October.	11	5	16
November.	4	8	12
December.	4	7	11
Total.	79	118	197

TABLE NO. 12.

Showing the number of pathological specimens, feces, pus, brains, stomach contents, milk, etc., which have been examined during each month:

January.	12
February.	17
March.	12
April.	18
May.	16
June.	9
July.	16
August.	17
September.	21
October.	2
November.	8
December.	16
Total.	164

TABLE NO. 13.

Showing the number of water examinations made during each month:

January.	0
February.	1
March.	1
April.	4
May.	3
June.	0
July.	10
August.	10
September.	3
October.	5
November.	1
December.	1
Total.	39

TABLE NO. 14.

Showing the cities from which water has been examined during the year:

	Times.
Jacksonville.	18
St. Petersburg.	1
Orlando.	1
Fernandina.	3
St. Augustine.	1
Chipley.	3
Citra.	1
Pensacola.	3
Newberry.	7
Daytona.	2
Kissimmee.	1
Total.	39

During the past year the Executive Office has been enabled, through the medium of The FLORIDA HEALTH NOTES, a former publication of the Board, which was revived in July last, to present monthly to the people of the State and to the Board's associates in sanitary matters in other States, a succinct statement of prevailing health conditions in Florida, together with such useful information plainly and clearly made, as would tend toward better hygiene and sanitary education of the people. From frequent expressions of commendation, which have been heard by the Board, concerning this little pamphlet, it is thought that it has been well received, and is appreciated. As the NOTES furnishes monthly live information of current health conditions, thus keeping before the public a pen picture, as it may be called, of the sanitary happenings of each month, and further, as it is already distributed among over four thousand citizens of Florida, it is not considered necessary to discuss in this Annual Report topics of general sanitary interest, which have already been noticed, or to enter into minute detail of health administration as has been the practice heretofore, when making a report of this kind, because it will be the custom hereafter to present these facts monthly and not to wait until the close of the year to submit a voluminous account of what perhaps might be considered stale matter. The citizens of the State will, no doubt, be more pleased to know of health events as they occur, which the HEALTH NOTES gives monthly, than to retrospect upon the "has beens" of the year, except, of course, when a general upheaval of unusual conditions has caused more than an uncommon concern in the subject.

An account of the management of the Maritime Quarantine of the State, which is now under the control of the United States Public Health and Marine Hospital Service Bureau at Washington, has no particular place in this Annual Report of the operations of the Executive Office, further than to emphasize the fact of the most cordial relations which exist between that Service and the State Board of Health of Florida and its Executive Officer. A grateful acknowledgment is here made to Surgeon General Wyman and his officers at the Bureau, as well as at Havana, for many courtesies during the year, in information obtained through special copies of

"Florida
Health
Notes"

Maritime
quarantine

weekly reports of the health conditions existing at Havana and on the Island of Cuba, as well as for valuable suggestions, and other assistance to the Board, which were accorded cheerfully and promptly whenever requested.

Consulting
Sanitary
Engineer

The evolution of many of the towns of the State from settlements to cities, has brought about a commendable desire for better sanitation and sanitary conveniences. To acquire these useful adjuncts to healthful living with safety to the individual and economy to the municipality, has been a problem which the local governments have attempted to solve, before instituting and constructing water works, sewerage and sanitary plumbing. The assistance of the State Board of Health has been solicited in several instances to aid in the proposition, and such sanitary knowledge bearing on the subject as the State Health Officer is possessed of has always been cheerfully and promptly given to help in obtaining the desired information. But the State Health Officer is conscious of a lack of acquirements in this direction, and feels that the people of the State, when they so request, should be given expert instruction along this line, because after a work of this nature is commenced, which generally involves great expense to the taxpayers, to have it prove disappointing in meeting requirements of population or fulfilling the expectations of the people, always involves a financial loss which the local government could not well afford to sustain. That no plan of this kind may ever be undertaken without careful consideration of all interests connected therewith, both for the municipality as well as the citizen, the Legislature should prohibit sanitary reforms which comprise improvements of this nature, anywhere in the State, without consultation beforehand with the State Board of Health, and the Board should be required to furnish the best and most competent advice on the subject.

To give this assistance intelligently, the services of a skilled sanitary engineer should be secured, who can be sent to the municipality making the request, to make a thorough examination of the geological formation of the environment and to draw plans, so that every safeguard involving expense and final results may be thrown around the enterprise. It is important that wholesome water should be gotten in the first place, and that a safe and sanitary disposal of domestic waste should be obtained

in the second place, with especial attention to the movement of sewage. If the Legislature will enlarge the powers of the State Board of Health to embrace the control of this phase of health management, and will authorize an expenditure from the Board's funds for this purpose, it is thought that an arrangement can easily be perfected with one of the leading experts of this scientific specialty, to answer any call of the Board for purposes of this kind. The geological formation of Florida is not as yet thoroughly understood, nor is it known that any accurate or logical explanation has ever been made of the source and direction of the underground streams of water which are known to exist. The "sink holes" found on the surface in different sections of the State, with undiscovered depths, and the abundance of artesian water along the eastern border of the peninsula, would indicate that there may be communication constantly had through these depressions with such streams, and warrant the very reasonable conclusion that the use of these "sink holes" as receptacles for sewage, which custom prevails in some sections of the State, is an exceedingly dangerous practice and quite likely to contaminate the potable artesian supply some distance from the source of possible infection.

In 1904, the State Health Officer wrote the Governor in regard to this matter, soliciting his cooperation in securing a geological survey of the State by the United States Government, basing his appeal for assistance in this direction upon the probable pollution of the underground currents of water, and which might possibly account for outbreaks of typhoid fever at points previously unaccounted for. The correspondence with Governor Jennings on this subject is here given to impress the fact that this question has been seriously considered by the State Health Officer for some time:

Geological
Survey of
Florida.

"Key West, Fla., May 13, 1904.

"To His Excellency, W. S. Jennings,
Governor of Florida,
Tallahassee, Florida.

(Through Hon. E. M. Hendry, president State Board of Health).

"Dear Sir:

"I beg respectfully to invite your attention to the

great apparent necessity for soliciting the cooperation of the United States Geological Bureau in determining the course of the underground water streams of the State. The State Board of Health is confronted with a most serious problem in connection with the potable water supply of many towns, associated as it is with the disposal of domestic waste. Where towns are located on river banks, sounds, or on the ocean, the disposal of sewage is not a difficult question to adjust, but many of the inland towns whose population has grown quite rapidly during the past ten years, seek now to adopt a more convenient and satisfactory method of disposing of sewage and have placed in operation a sewer system at the same time that a water works plant was established.

"In not a very few of these inland towns the sewage is run into a 'sink hole,' of which there are a number in the central and western part of the State, and the sewage passes to where no one knows.

"In one instance, at Live Oak, there is this disposal of sewage, and I have lately caused the public water supply of that place to be examined bacteriologically, and the Bacteriologist of the Board reports that he found the sample of water sent him to be contaminated with the colon bacillus, the bacillus which infects the intestinal tract of the human.

"It is therefore conclusive evidence to my mind that there is some connection between the stream of water at the bottom of the 'sink hole' at Live Oak and the well of the water plant at that place. This present contamination produces intestinal disorders, and many of the physicians lately in attendance on the State Medical Association at Live Oak were affected by diarrhea and other intestinal discomforts.

"In Ocala the sewage is disposed of in the same way as at Live Oak, yet I have not heard of any increased sickness at that place; the water supply of Ocala being also from a drilled well. Should the 'sink holes' alluded to become infected with the typhoid bacillus at any time from discharge of typhoid dejections therein, it can be appreciated how easily the water supply of a place can thus become contaminated if there is connection between the 'sink hole' and the potable water well.

"There is another menace from this same source which is deserving of notice and attention. One or several of

these wells became contaminated with typhoid or other disease producing bacilli, may in turn contaminate the underground stream from which this particular well derives its own supply of water, and thus may be the means of conveying typhoid germs to other portions of Florida, the starting point of the infection, however, being at some distant point.

"It can be appreciated, I think, from these cursory remarks and instances given, that it is highly necessary that some well formed idea shall be had of the character and course of the streams of water which flow a considerable distance below the surface, and I know of no way to obtain this information except through the cooperation of the United States Geological Bureau.

"As pertinent to what I have just said, I beg to quote from one of the leading Medical Journals of the country, under a paragraph entitled '*An Epidemic Probably Prevented*:'

"An exchange states that by a series of experiments which proved how readily deep wells and springs could experience pollution, the town of Quitman, Ga., was doubtless saved from the danger of an epidemic of disease. In this place the water supply of the town is derived from wells, and in planning a sewerage system it was proposed to dispose of the public sewage by discharging through a bore hole into an underground stream. The possibility that contamination might result, however, was early suggested, and led to practical experiments being undertaken by the United States Geological Survey and the Geological Survey of Georgia, in order to determine the matter definitely. Two tons of salt were placed in the well where it was planned to empty the sewage, and the water from the wells which had been previously examined, especially as to their chlorine contents, was again analyzed, samples being taken at intervals during and some time after the experiment. It was found that the salt had permeated all of the wells in the town, demonstrating conclusively that disease germs could be easily communicated to the drinking water.

"These experiments are in line with some carried on in Europe several years ago, where it was found that bacteria, placed in certain wells, could be de-

tected at other sources of water in the vicinity and emphasized the importance of carefully examining and safeguarding water supplies under all conditions.'

"The above quotation is so interesting and instructive that I could not forbear submitting it to you. The hope is expressed that the subject may appeal to your known interest in health matters so strongly that you may take up the question of underground streams in Florida with the United States Geological Survey Commission.

"Yours very truly,

"JOSEPH Y. PORTER,

"State Health Officer."

"Tallahassee, May 30, 1904.

"Dr. Joseph Y. Porter,
State Health Officer,
Key West, Fla.

"Dear Sir:

"I have the honor to hand you herewith copy of letter addressed to the Hon. Secretary of the Interior in compliance with your request concerning the pollution of the water supply of the various towns from the practice of discharging sewage through a 'sink hole' into an underground stream, together with a copy of the reply from Hon. Thomas Ryan, Acting Secretary of the Interior, dated May 28, 1904, for your information.

"I have the honor to remain,

"Yours very truly,

"W. S. JENNINGS,

"Governor."

Inclosures:

"Tallahassee, May 23, 1904.

To the Honorable Secretary of the Interior,
Washington, D. C.

Sir:

I have the honor to hand you herewith copy of letter dated Key West, Fla., May 13, 1904, from Dr. Joseph Y. Porter, State Health Officer, addressed to me, which is self-explanatory, and I beg to join in the request therein expressed for the cooperation of the United States Geological Bureau in determining the course of the underground water streams of Florida.

I will greatly appreciate your having this communication referred to the Director of the United States Geological Bureau or other proper official for consideration and attention.

I have the honor to remain,

Yours very truly,

W. S. JENNINGS,

Governor."

"Department of the Interior, Washington, May 28, 1904.

"Hon. W. S. Jennings,
Governor of Florida,
Tallahassee, Fla.

Sir:

Your letter of the 23rd instant has been received, transmitting copy of a letter from Dr. Joseph Y. Porter, State Health Officer, concerning the pollution of the water supply of various towns in your State from the practice of discharging sewage through a 'sink hole' into an underground stream, and requesting the cooperation of the Geological Survey in determining the course of the underground streams of your State; and I have to inform you that the same has been referred to the Director of the Geological Survey for appropriate action.

Very respectfully,

THOS. RYAN,
Acting Secretary."

"Tallahassee, Fla., June 9, 1904.

Hon. Jos. Y. Porter,
State Health Officer,
Key West, Fla.

My Dear Sir:

I have the honor to inclose herewith copy of a letter received from the Department of the Interior, United States Geological Survey, Washington, D. C., dated June 6, 1904, addressed to me by the Honorable Director of the U. S. G. S., relative to the contamination of underground water supply of the various towns in the State from the practice of discharging sewage into a sink hole, stating in effect that the Geological Survey will be glad to assist the State or town authorities in the study of this matter in whatever way possible, but can not do so at the present on account of the absence in the field of the hydrologists

who have the matter in charge, stating that in the autumn, however, an examination may be possibly taken up, the expense of which should mainly be borne by the local authorities or by the State, as the Survey has no available funds which can be assigned for this purpose; further stating, that the Division of Hydrology of the Geological Survey might possibly detail an expert without charge for the supervision and execution of the work.

If I can be of any further service it will be my pleasure to aid you in this important undertaking.

With best wishes, I am,

Yours very truly,

W. S. JENNINGS,
Governor."

Inclosure:

"Department of the Interior, United States Geological Survey, Washington, D. C., June 6, 1904.

Hon. W. S. Jennings,
Governor of Florida,
Tallahassee, Fla.

Sir:

I desire to acknowledge the receipt of your letter of May 23, also a copy of a letter of Mr. Joseph Y. Porter, State Health Officer, in which attention is called to the contamination of underground waters in the State.

In answer to your request, I have the honor to state that the danger of polluting wells by discharging sewage into sinks is of considerable gravity. I will further say that the Geological Survey will be glad to assist the State or town authorities in a study of this matter in whatever way possible, but regret that nothing can be done at the present time because of the absence in the field of the hydrologists who would have the matter in charge. In the autumn, however, an examination may possibly be taken up, the expense of which should mainly be borne by the local authorities or by the State, as the Survey has no available funds which can be assigned for this purpose.

The Division of Hydrology of the Geological Survey might possibly detail an expert who would give his ser-

vices free of cost for the supervision and execution of the work.

Very respectfully,

CHAS D. WALEAT,
Director."

"Jacksonville, Fla., June 20, 1904.

Hon. W. S. Jennings,
Governor of Florida,
Tallahassee, Fla.

Sir:

Thanking you very much for your interest and valuable assistance, I beg to acknowledge receipt of your letter of the 9th instant, addressed to me at Key West, with copy of letter from Chas. D. Waleat, Director Division of Geological Survey, in relation to the underground streams of Florida, wherein he promises assistance to determine the course and origin of these streams in the State, provided the State or municipalities will bear the main expense of this inquiry. As it is exceedingly doubtful that municipalities will aid pecuniarily in making these investigations, I would like to have your opinion as to whether the State Board could incur this expense and pay from its funds for this investigation.

Thanking you for your interest, which I highly appreciate, I am,

Yours very truly,

JOSEPH Y. PORTER,
State Health Officer."

It is apparent therefore that an urgent necessity exists for additional help in this matter, and that the Board shall as early as possible increase its further usefulness to the people of Florida by affording every municipal government an opportunity to have the very best advice on the practicability and efficient conception of sanitary accessories before attempting a move in this direction.

The filtration sewage plants at Tallahassee and at Lake City, constructed by Mr. W. W. Lyons, C. E., of Palatka, Fla., seem to have solved a difficulty in disposal of domestic wastes for those cities and to have overcome many objectionable features connected with this subject which formerly confronted the authorities of these places.

A description of these plants is given elsewhere for the information of such readers as may be interested in the subject. (See appendix.)

It is gratifying to state that the Treasury of the Board is provided with ample funds to meet any ordinary exigencies which may arise in dealing with a management of possible unhealthful conditions.

In each annual report for eighteen years, the question of financial management has been minutely gone into and explained, so that there is nothing new at this time to be further said on this subject, other than to emphasize what has been stated in former years:

Finances.

First—That it would be poor business policy to reduce the annual income of the Board by diminishing the amount of tax levy now provided for by the State for the support of the Health Department of the State, or to in any way interfere with the same by conferring discretionary powers so to do. The sagacity of foresight, that gift which confers an ability to anticipate future events, has not yet been given to mortal man, and therefore it is impossible for a body of men or one man to determine what exigencies of sickness or of epidemic prevalence of disease might or may arise during the year or ad interim session of the Legislature.

Second—That with a fund reasonably large and always available, better service can be obtained and at a more economical figure; and more prompt and efficient help rendered, by ability to promptly pay for service as it is required and performed, and that the question of economy of such management should be apparent to every business man of the State.

Third—As no expenditures can be made by the Board except upon the scrutiny or audit of the Comptroller of the State, this fund, never in its entirety under the control of the Board or its Health Officer, to dispose of according to their liking, but always subjected to the rulings of the Comptroller's office, can never be injudiciously expended, nor in any manner except for the benefit and for the health of the people of Florida. It may be accepted as an axiom that efficient service of any kind and for any purpose can be better obtained by prompt payment upon completion of service than in due bills which must be discounted for redemption.

A resume of the statement which follows, shows that the Board has received during the year from the Comptroller of the State \$42,931.22; has expended for just obligations of the Board \$42,302.85; and of this latter sum \$29,377.83 have been required for actual current monthly expenses of management; and \$12,925.02 for extraordinary expenditures such as the care of contagious diseases and any other requirements of sanitary supervision.

Statement of money received upon requisition on the State Comptroller, showing amount of the requisitions, amount expended by the Board to meet current expenses, and the amount returned to the Comptroller, together with vouchers in settlement of each month's account, respectively:

Month.	Regular Requ'st'ns.	Special Requ't'ns.	Expended	Ret'n'd to C'tr.
January	\$ 2,500.00		\$ 2,479.05	20.95
January		\$ 1,257.42	1,251.52	5.90
February	2,500.00		2,485.38	14.62
February		2,419.00	2,419.00	
March	2,500.00		2,499.66	.34
March		1,942.97	1,942.97	
March		843.75	843.75	
April	2,500.00		2,500.00	
April		1,294.29	1,294.29	
May	2,500.00		2,482.37	17.63
May		1,183.61	1,183.61	
June	2,500.00		2,439.54	60.46
June		777.50	777.50	
July	2,500.00		2,439.14	60.86
July		1,169.97	1,169.97	
August	2,500.30		2,469.53	30.77
September	2,500.00		2,495.87	4.13
September		900.50	900.50	
September		382.66	382.66	
October	2,500.00		2,382.60	117.40
November	2,500.00		2,223.64	276.36
December	2,500.00		2,481.05	18.95
December		759.25	759.25	
	\$30,000.30	\$12,930.92	\$42,302.85	\$628.37

Amount monthly requisitions\$30,000.30
 Amount special requisitions 12,930.92
 Amount expended by the Board.... \$42,302.85
 Amount returned to the Comptrol-
 ler 628.37
 Total\$42,931.22 \$42,931.22

DETAILED STATEMENT OF EXPENDITURES OF THE STATE BOARD OF HEALTH, 1906.

Per diem and mileage, Members of Board.....\$ 139.60

Salaries and expenses:

Salary and traveling expenses, State Health
 Officer 3,548.64
 Salary and traveling expenses, Assistants to the
 State Health Officer 7,910.37
 Salary and traveling expenses, County Agents.. 3,550.00
 Salary and traveling expenses, Veterinarian... 1,731.46
 Salary and traveling expenses, Attorney..... 600.00
 Salaries, Sanitary Patrolmen 2,820.00

Maintenance of office:

Clerical assistance, which includes pay of two
 clerks and office boy, together with salary
 and traveling expenses of Secretary to the
 State Health Officer 2,931.04
 General office expenses, including office rent,
 lights, telephones, postage, expressage, office
 fixtures and other incidental expenses.... 1,698.18
 Printing, stationery, etc..... 871.42
 Telegraph service 322.73
 Miscellaneous, including insurance..... 439.43

Laboratory:

Salaries 2,929.78
 Equipment and maintenance 1,128.59

Equipment and Maintenance of Isolation Hos- pitals:

Duval County 1,977.23
 Dade County 4,061.53
 Escambia County 144.56
 Hillsboro County 1,414.43
 Monroe County 185.51
 Expenses incident to smallpox..... 2,457.74
 Medicine and disinfectants 147.27
 Sera-Antitoxin and Antitetanic serum..... 280.10
 Vaccine Virus 713.24

\$42,302.85

Necrology.

Institutions and organizations as they advance in years, meet with the same vicissitudes incident to life as does the individual member of society. Disappointments, losses, sorrows and grief come to the corporation, "not" perhaps with as stinging blow nor with as crushing force as to an individual, but yet both in their time and in their way suffer the ills incident to human life. When young, each rejoices in a prospect of success and happiness; each looks forward only to the bright and pleasing things which always loom up on the horizon of youth, but as the days advance and the milestones which denote only too truly the shortening of the distance which marks the end of all things human, the fact impresses itself with great emphasis, what the Psalmist has said: "It is appointed unto man once to die," and that whether at sunrise, noon day or sunset of life, the purpose of creation having been fulfilled, the object of that life has, by Divine will, been accomplished.

For fourteen years the State Board of Health met with no loss by death of its personnel, and it is with grateful acknowledgment that the pleasing record is made that even of those who separated themselves from the active official duties of the Board, by resignation, they are yet numbered among the Board's most influential and indefatigable workers.

In 1903, the first break came in the chain of living associates, and since then each year it has been a sad and painful duty to the Executive Officer to record the death of some valued associate or friend.

Last year, 1906, a year having so much of sadness and the bitterness of sorrow to the writer, the Angel of Death again visited the official family of the Board and, almost without warning, summoned one of its esteemed and highly beloved members to the great beyond. As was said at the time when making the announcement of the death of Dr. Eduardo Andrade:

"With profound sorrow, and a sense of personal as well as official bereavement, the State Health Officer of Florida announces to the medical profession of the State, municipal boards of health, boards of health of other States, and friends generally, the death of Dr. Eduardo Andrade, Bacteriologist of the State Board of Health of Florida, which sad event

occurred at eight-thirty o'clock this morning in New York City. Words can not convey nor can human tongue express the grief which the State Board of Health feels in the loss of its talented associate, who although young in years, but thirty-three, nevertheless possessed the mental qualities of an accomplished and polished scholar and scientist, and typified in every act of life all the attributes of a Christian gentleman.

Office State Board of Health of Florida, Jacksonville, Fla., September 20th, 1906."

Dr. Andrade was a man who stood both in his professional as well as in his social life, preeminently high in the confidence of his fellowman and in the respect of the community in which he lived. Valued for his ability in his chosen profession, honored for his strict adherence to Christian principle, and loved for the charming attributes of a modest disposition, the characteristics of a pure life shone out in peculiar brilliancy to those who were happy in his confidence and friendship.

A man young in years but rich in mental accomplishments, whether of special attainments relating to his specific branch of expert scholarship, or in the broader field of more general information, he was a delightful companion and charming associate. Rarely was there a topic which he could not discuss with fluency and his fund of useful knowledge seemed boundless. Consulted by men many years his senior, on problems relating to pathology and some of the more abstruse subjects of disease, he seemed always able to furnish the advice or the information sought, and gave it in such a modest, unassuming, gentle way as if to impress the fact that a favor was conferred by requesting of him his opinion.

Dr. Andrade was a polished gentleman; possessing a charity of disposition which thinketh evil of no man, he was ever ready to give of his substance to the needy whether in purse or heart. Tactful in his dealings with men, he embodied the ideal official and the generous teacher. Dr. Andrade possessed to a marked degree a moral courage which marks the Christian man. For months he knew that a disease which held out no hope of cure was slowly but surely hastening him to the grave; and that he might not distress his loved ones, or his friends, he concealed the fact in his own breast; and even

after the knowledge came to the colleague in his office, he enjoined silence and bore with unflinching fortitude and patient resignation, a contemplation of the future which must oftentimes have sorely distressed him to anticipate. Notwithstanding a sadness of spirit, which it would seem impossible for him to cast off, he nevertheless attended as assiduously to his duties in behalf of suffering humanity as physical pain and bodily ailment would permit, only yielding to advice of friends, who then did not know the nature of the malady which was sapping his strength and life, for a rest and change of climate, in the hope of prolonging his life for future usefulness in the Laboratory of the State Board of Health, the child of his creation and in the welfare and future of which his fondest hopes were centered.

He had fought a good fight, and, with the complete consciousness of every duty well done, every trust confided to him honestly and sacredly performed, he died as he had lived—a Christian gentleman in the very truest sense of the word. Like some valiant Knight of old, whose lance had been broken in a fight against overwhelming numbers, and who, finding himself overpowered at last, he surrendered only when defeat was inevitable, and then with a Christ-like submission.

"Gathered the drapery of his couch about him
And lay down to pleasant dreams."

Recommen-
dations.

Besides recommending the appointment of or engagement of a consulting sanitary engineer, whose services can be utilized to determine the practicability and to provide plans for the construction of systems for disposal of domestic waste in accordance with approved sanitary views, it is also suggested that the Board request the next Legislature to change the title of the State Board of Health. It meets with the approval of sanitarians everywhere that the term "Department of Health" is better fitted to represent the duties which properly belong to this division of a State Government, and instead of having a "State Health Officer" as Executive Officer of the organization, the designation of title should be "Commissioner of Health." As this proposed change is a matter

purely of euphonious expediency and involves no expense to the State, it is not seen how the change can be objected to.

The full text of a bill to alter and make this change will be found in the Appendix to this Report.

Therefore, the recommendations which are submitted for the consideration of the Board at this meeting, are:

Summary
of recom-
menda-
tions

FIRST—The permanent repealing of Rule Fourteen, which refers to payment for returns of vital statistics.

SECOND—The acceptance of Dr. Ennis' offer of the property owned by him at Narcoossee, as a sanitarium for open air treatment of consumptives.

THIRD—Authority to engage the services of a consulting sanitary engineer when necessary or required; and,

FOURTH—The change of the title of the "State Board of Health" to "Department of Health of Florida," together with the change of title of the Executive Officer from "State Health Officer" to "Commissioner of Health."

Respectfully submitted.

JOSEPH Y. PORTER,
State Health Officer of Florida.

APPENDIX.

APPENDIX.

BACTERIOLOGICAL INVESTIGATION OF THE SEPTIC TANK AND FILTER BEDS SYSTEM OF SEWAGE DISPOSAL AT TALLAHASSEE, FLA.

Jacksonville, Fla., March 10, 1906.

*Dr. Joseph Y. Porter,
State Health Officer,
Jacksonville, Fla.*

Dear Doctor:

I have the honor to report on the bacteriological investigation made by your orders of the "septic tank and filter beds" system used in Tallahassee for the disposal of sewage of that place. The samples of liquid collected by Dr. Holloway at the "dosing tank" contained 20,000 bacteria in each cubic centimeter, and showed the presence of the bacillus coli communis. This same liquid, however, after passing through the "filter beds," contains only 6,000 bacteria in each cubic centimeter, and no bacilli coli communis.

Although it is not advisable to draw conclusions from one examination only, I think that these results, taken in connection with similar ones obtained in other places where plants of this kind are in operation, authorize a recommendation of this system of disposing of sewage as one of the safest methods of preventing a pollution of water supply by human excreta. The fact that our examination has shown that the water of the "dosing chamber" contains 20,000 bacteria in each cubic centimeter and likewise bacillus coli communis, demonstrates that the action of the "septic tank" alone is not always sufficient for the purification of sewage. Complete purification requires the use of "septic tank" and "filter beds" combined. The action of the "septic tank" facilitates the oxidizing action of the filter beds, and makes the whole process more economical and efficient. By the action of anaerobic bacteria in the septic tank, from 90 per cent to 95 per cent of the solid matter contained in the sewage is converted into

liquid or gaseous compounds, and about one-half of the albumenoid ammonia is changed into harmless matter. The effluent, therefore, contains mostly, easily decomposable nitrogenous matter. The aerobic action which occurs in the filter beds completes the process of purification by the oxidation of the organic material left. The process going on in the tank is accordingly only preparatory to the oxidation which occurs in the filter beds. It has been found by repeated experimentation that the addition of chemicals to the sewage is to be condemned, as they prevent the natural biological process and by clogging the filters materially interfere with the efficiency of the whole system.

Although we cannot yet be absolutely certain that in every instance all pathogenic bacteria contained in the sewage will be destroyed, scientific research along this line has been unanimous in considering the action of the septic tank and filter beds as sufficient guarantee against the pollution of the water supply. It has been shown that it is likely that some of the liquefying organisms have a germicidal action on typhoid bacilli, so that their presence in the tank and their arrest in the filter beds diminishes the chance of survival of pathogenic bacilli.

The plants at Madison, Wauwatosa, West Allis, Fon du Lac (cities of Wisconsin) and Glencoe and Champaign, Ill., have been in operation for a number of years with the most satisfactory results.

The economic aspect of this system should also be considered. In Wisconsin, where this system has been established in many towns, plants handling between 170,000 and 600,000 gallons of sewage in twenty-four hours, cost about \$5,000 yearly to operate.

In conclusion, I may be permitted to state that I think that no better system for the disposal of sewage in many of our inland towns could be established, and that outbreaks of typhoid fever, due to the present crude and unsanitary methods of disposing of excreta in many instances, would be thereby prevented.

Yours truly,

ED. ANDRADE, Bacteriologist.

REPORT OF AN INSPECTION OF YELLOW FEVER CONDITIONS IN HAVANA, CUBA, IN APRIL, 1906, BY A REPRESENTATIVE OF THE STATE BOARD OF HEALTH OF FLORIDA:

Tampa, Fla., April 14, 1906.

Dr. Joseph Y. Porter,

State Health Officer,

Key West, Fla.

Dear Doctor:

I will now confirm in writing my verbal report of my recent trip to Cuba, made to you on the 8th instant, at Key West.

I arrived in Havana on March 27th. The steamer was boarded by the sanitary officer, Dr. Milanes, a personal friend of mine, and I noticed that all of the second-class passengers coming from our State were vaccinated "good measure." The doctor invited me to go aboard his naphtha launch, and took me ashore.

In the conversation with the doctor when we went ashore, he volunteered the information that they had strict orders to report all suspicious cases of yellow fever at once and to *tell the truth*.

I went at once to see Dr. C., who claimed he had under treatment three cases of dengue. I went out with him in his buggy, and he showed me the three cases. One was a typical case of dengue with an eruption. Another was a sister of the first patient, and her sickness was believed to be due to her being in the same house, which was 197 Monte St. The third case was too far advanced in convalescence to enable me to say what the trouble had been. This case was at 414 Camparira St.

The following day I went the rounds with the same physician, and he showed me a good many other cases, but none of much interest. Measles was the prevailing illness, and some of the cases that were believed to be dengue, were, in my opinion, nothing but cases of German measles.

On the 29th, while I was visiting La Casa de Socarro Segunda Demarcairon, at Reina 72, I found they had there a native of Spain, aged 25 years, named Manuel Calsede. This man had a flabby tongue, in which there were impressions of the teeth, and pale gums. I was able

to examine some of his urine, in which I found no albumen. He had nothing but sub icterus. The most interesting part was, that as this case was taken to Las Animas (yellow fever) Hospital, I was able to watch the procedure of the Sanitary Department of Cuba. They brought an ambulance with a mosquito bar, and he was carefully placed in this ambulance and taken to the hospital. This case afterward proved not to be yellow fever.

I was glad to have this opportunity of observing the way in which they handled suspected cases, and they took all suspicious cases to a place well prepared for the care of yellow fever.

In my excursions through the different hospitals in Havana, I also heard of the deaths of three children in Cardenas, aged 2, 4 and 5 years, all within one week. The last death was on Thursday, March 15th, and they had been treated by Doctors Tazo, Capote and Neira. I understood that the diagnosis of the cases was infectious fever, whatever that means. I tried hard to get further information, but could get no news from Cardenas. There was no news of any other case in Cardenas, and as two of my friends were physicians, and I could get direct information from there, I did not think it advisable to go there.

The physician in charge of the Marine Hospital Service told me of a fear he had of Bolondron and Alacranes, so I left Havana on Saturday, the 31st, and arrived that day at Bolondron, and left that night, after finding nothing for Placetos, where I spent Sunday. On Monday, I visited Remedios, and on Tuesday, I went to Santu Spiritu, where I inspected the hospital and found it well fixed for the care of yellow fever. I returned to Havana that same night, and, feeling sure that there was no yellow fever at that time, I was getting ready to return to Tampa on Thursday, April 5th, but heard of a death at 73 Amistad Street, which one of the physicians claimed was yellow fever. The Havana Board held a meeting and declared that it was not a case of yellow fever. This case was a child eight months old, and I understood that the diagnosis of the Board was "Pernicious Progressive Anemia." There was no post mortem in this case, and there was no examination of urine made, for the satisfaction of the man who claimed it was a case of yellow fever, but this man claimed that the child had a typical black vomit.

All of this information I gave to the Marine Hospital Service at Havana, so they could keep a lookout.

My findings are as follows:

They are well prepared to take care of cases in Cuba. There seems to be none at present; but if there is a case, under the present system, it will be days before it gets to the knowledge of the Board of Florida. That the Marine Hospital Service, having two men engaged in office work, has not sufficient opportunity to obtain information of their own, and have to depend entirely upon Cuban official channels.

I am,

Respectfully yours,

CHAS. WM. BARTLETT,

Agent State Board of Health of Florida.

ANCHYLOSTOMIASIS.

Jacksonville, Fla., Sept. 19, 1906.

Dr. Joseph Y. Porter,

State Health Officer,

Jacksonville, Fla.

Dear Doctor:

Upon my trip down the east coast, touching at Palatka and Miami, I gathered what data I could bearing upon the prevalence of hookworms at these two places. Drs. Warren and Welch, at Palatka, report that they have treated many cases, basing their diagnosis upon the clinical manifestations, but with satisfactory results. While out with Dr. Welch one afternoon, I saw no fewer than six children who presented very strong clinical symptoms of hookworms.

Dr. Jackson, at Miami, also informs me that at Miami he has treated a number of cases; likewise basing his diagnosis upon the clinical manifestations, and also with satisfactory results. I saw one boy on the street at Miami that I have no doubt was a case of uncinariasis. The tendency to associate this disease with ground-itch seems to be a growing one.

In the near future I hope to have sufficient data together with which to make a reasonably full report upon the extent to which hookworms prevail throughout the State.

Very respectfully,

HIRAM BYRD,
First Assistant to State Health Officer.

SANITARY CONDITION OF WINTER PARK AND ROLLINS COLLEGE.

Jacksonville, Fla., September 24, 1906.

Dr. Joseph Y. Porter,
State Health Officer,
Jacksonville, Fla.

Dear Doctor:

I have the honor to make the following report upon the sanitary conditions of Winter Park and Rollins College:

Winter Park is a small place having a population of about 250 in the summer and possibly 600 to 700 in the winter. It nestles among the lakes of Orange County—a chain of lakes having their origin near Orlando and being connected continuously by small gullies and finally finding no outlet into Lake East Tohopekaliga, and thence to the Kissimmee River. The lakes are bordered with hills and hammocks in the vicinity of Winter Park, and it is on these hills and lake borders that the town and college grounds are located.

Winter Park being largely a winter resort, a number of wealthy people of the North have built homes down there, where they spend the winter season. It is a place of rare beauty, and its native charm has not been spoiled, but rather enhanced by the innovations of man. It is one of the few places of the State that has no back streets and unsightly sections. The college campus overlooks Lake Virginia, and its highest point is 34 feet above water level.

When investigating the sanitary conditions of a place in the light of our present knowledge, we inquire into a prevalence of mosquitoes as bearing upon malaria; the source and supply of drinking water and the method of

disposal of domestic waste for their bearing on typhoid fever; therefore, it is pleasing to note that Winter Park has not many mosquitoes, and that the college in particular has all of its dormitories thoroughly screened. Malaria is almost unknown among the college students, as would be expected. The drinking water supply of the college comes from a well about 100 feet deep, cased down to a depth that it strikes the solid rock. This well is located on the campus, and the water level is about 28 feet below the surface, being about the level of the water in Lake Virginia some 200 feet away.

The bucket system of sewage disposal is in vogue.

Altogether, I am pleased to commend the town and college for their sanitary condition and general attractiveness.

Very respectfully,

HIRAM BYRD,
First Assistant to State Health Officer.

PERNICIOUS MALARIA.

Green Cove Springs.

Plant City, Fla., October 13, 1906.

State Health Officer,
Jacksonville, Fla.

Dear Doctor:

With the aid of the physicians and father of the children whose sudden deaths caused some alarm among the more excitable people of Green Cove Springs, I collected the following data or history of symptoms of individual attacks:

Both children were members of the family of Mr. C., who moved to Green Cove Springs some four weeks previously, from the Ocklawaha.

The first case was that of the little girl, aged 5 years. Past illness: Last fall had "chills and fever" for three months. Friday, October 5th, she was taken ill. Had a light fever; no special complaint; lay around the house; took no medicine; got up on Saturday feeling all right. Sunday morning: Taken with chill; complained of headache (no particular location) and stomach ache; consid-

erably nauseated; vomiting; at times bilious or yellowish mucus. Father says that face was not flushed, nor there suffusion or congestion about eyes; child was naturally of a yellow color (profound anemia that could have been due either to hookworms or chronic malaria); urine highly colored; apparently not very ill.

Monday morning: Physician called; child very ill; vomiting; tongue evenly coated; no swelling, bleeding, or congestion about gums; and retching almost continuously; character same, toward last, tinged with blood. Temp. 104 degrees, pulse 120, poor volume tone and easily compressible; vomiting better; features unchanged; abdomen soft, lax; slight pain over epigastrium on pressure; complains headache; bowels loose and watery.

3 P. M.: Temp. 105 degrees; pulse, 150; vomiting; almost continuous retching; radical pulse disappears; unconscious; three hours later, death.

All the medicine given was calomel tab. 1-10 gr., with small amount of Gaultheria; when doctor was called no medicine could be given by mouth.

Throat clear, tongue said to have been covered with blackish discoloration; no meningeal symptoms.

Little boy; aged 10 years.

Suffered last spring for fourteen weeks with "chill and fever;" no other illness mentioned by his father.

Was taken ill Tuesday, October 9th (no chill); slight fever and nausea.

Wednesday, 10th: Clear of fever, while in early morning; later it rose to 102 degrees; pulse, 110; bilious, vomiting (calomel acted well); features normal; conjunctiva sub icteric tint; tongue coated entire; belly soft, lax; liver and spleen slightly enlarged; patient apparently doing nicely.

5 P. M.: Temp., 101 degrees; pulse stronger, 110; patient complains of an indefinite pain in head and stomach; restless during night.

Thursday A. M. early: Temp., normal; pulse not over 100.

Thursday 10 A. M.: Scene begins to darken; temp., 103 degrees; pulse about 120; and soft, poor.

Thursday, 11 A. M.: Unconscious and dying. Only

medicine that patient retained was the calomel; quinine was given later in solutions, but doctor doubts if single dose was retained.

Examination of patient few hours before interment: Of good frame, but poorly nourished; skin surface profoundly anaemic, suggestive of lemon tint everywhere; here and there splotches of post mortem stains exposed; skin surface free from eruption; no herpes about lips; conjunctiva ocular pale yellow; other mucuous membrane blanched.

From the history of chronic malarial poisoning, peculiar irregular types of fever, high pulse rate, continuous severe gastro-intestinal symptoms, sudden onset of grave symptoms, ending in rapid death, absence of uremic complications, I was inclined to think that we were dealing with a pernicious type of malaria.

No blood examination or analysis of urine was made of these two cases.

In the friendly consultation following an examination of the father, who had had a chill a few hours before, I advised the use of the hypodermic administration of quinine in effective doses, at once. A large dose of calomel and soda had been previously given; treatment to be increased and continued until results were obtained. Then followed for weeks with strong ante periodic and constructive tonics. A modified treatment of this was recommended also for the others of the family.

Yours very truly,

C. T. YOUNG,

Second Assistant to State Health Officer.

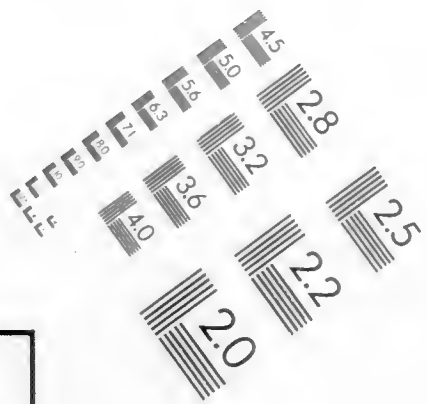
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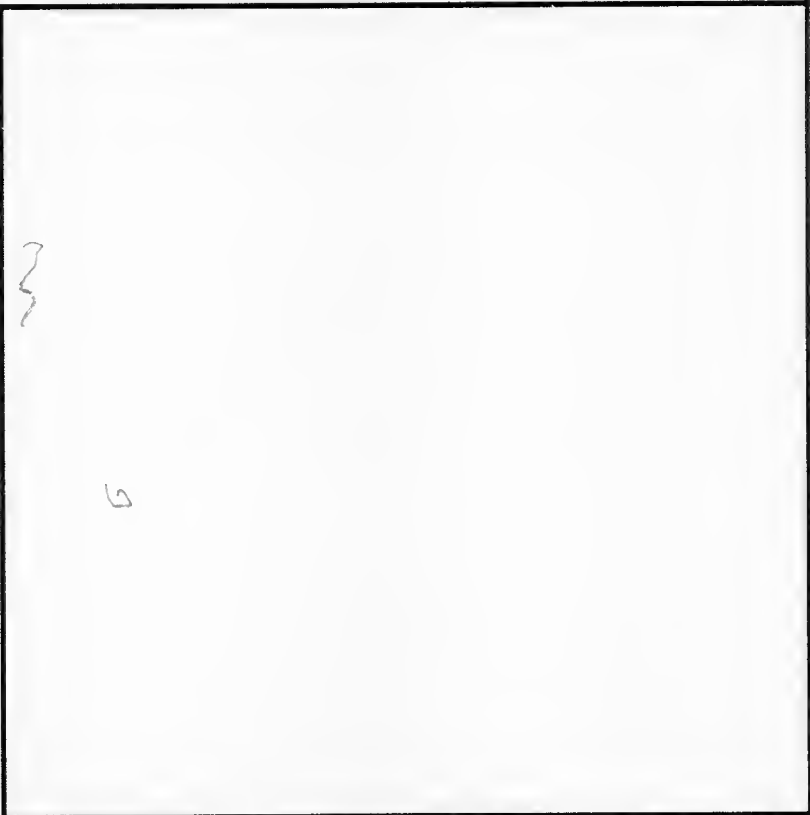
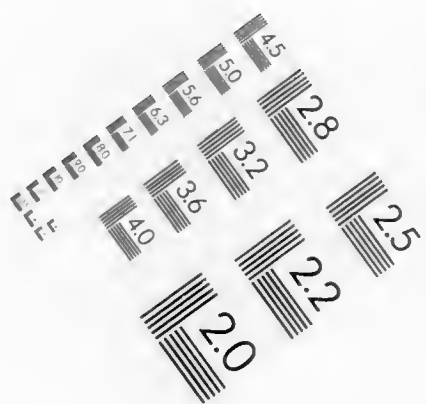
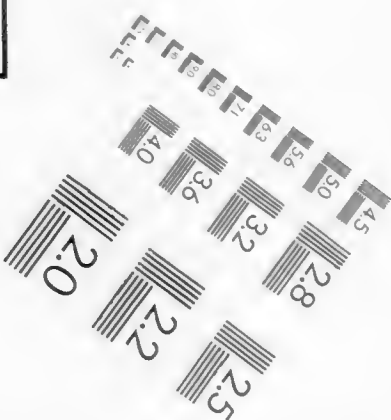
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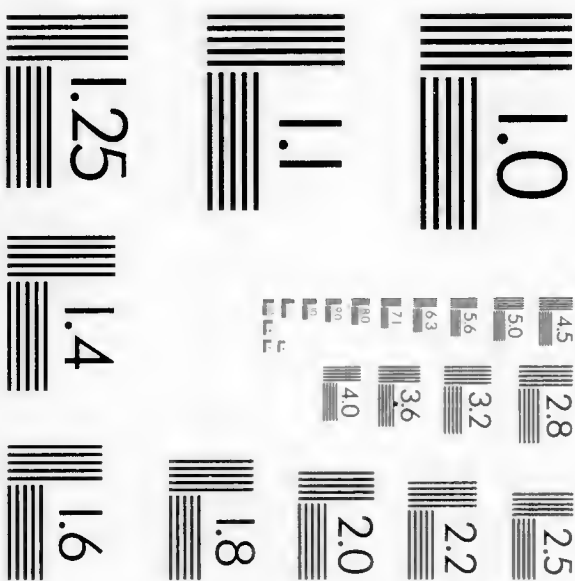
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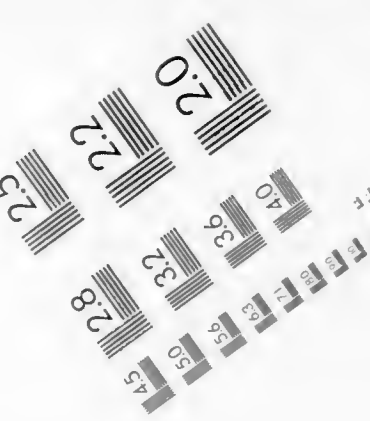
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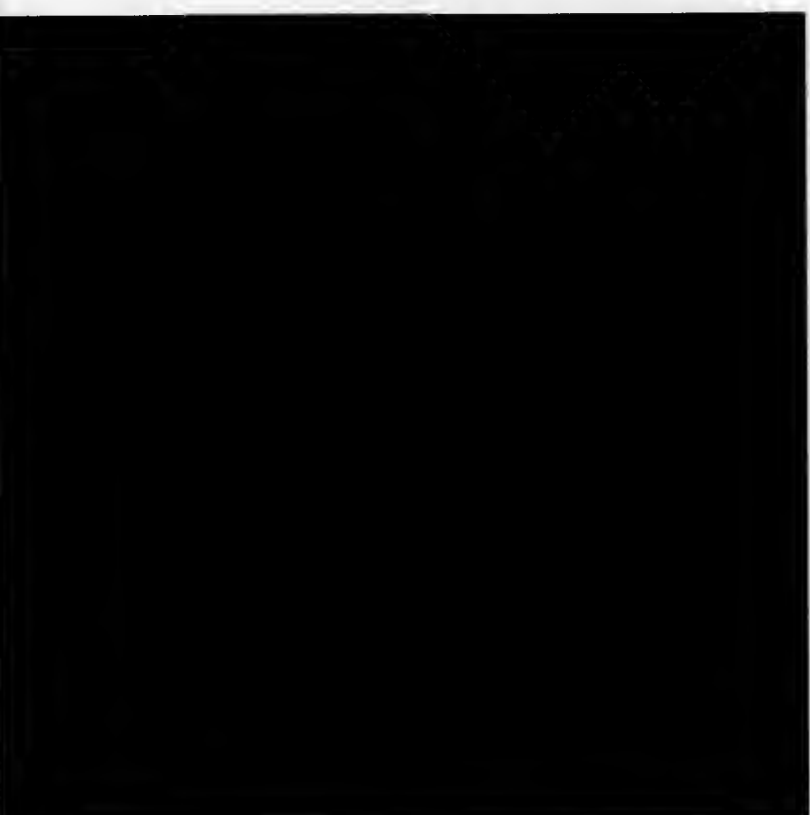
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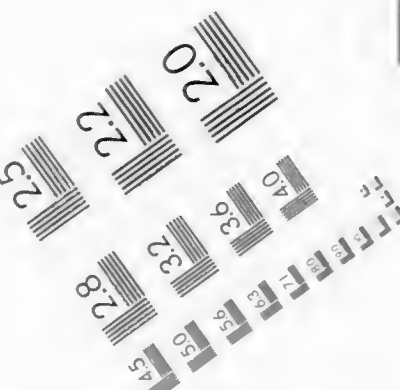
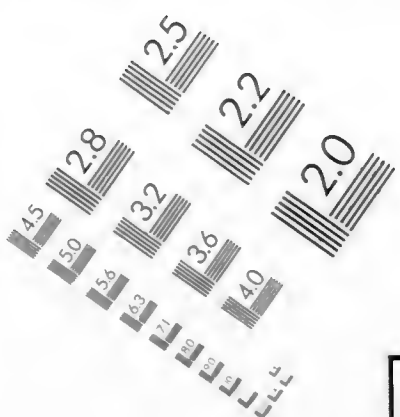
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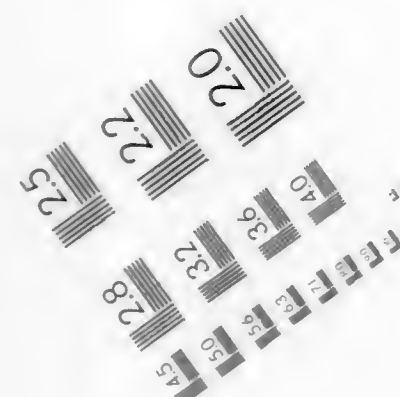
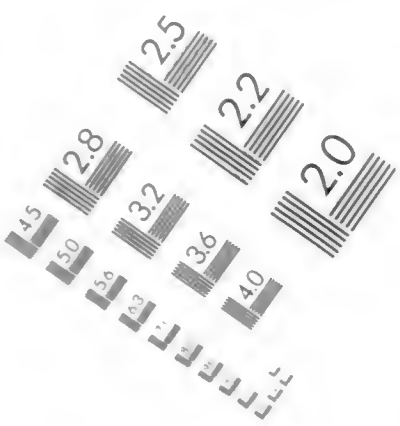
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